



INVITATION TO BID NUMBER SEF-1471

RETURN THIS BID TO THE ISSUING OFFICE AT:

Department of Transportation and Public Facilities
HQ State Equipment Fleet
2200 E. 42nd Avenue
Anchorage, AK 99507

THIS IS NOT AN ORDER

ITB TITLE: 6x4 Trucks, 8 CY	DATE ISSUED: 6/18/2009
BID OPENING: 7/16/2009 @ 2:30 pm	MANDATORY WORKSHOP: 6/30/2009 @ 9:00 am
CONTRACTING OFFICER: Cathi Dwyer	SIGNATURE: 
E-MAIL: catherine.dwyer@alaska.gov	PHONE: (907) 269-0786

SEALED BIDS MUST BE SUBMITTED TO THE STATE EQUIPMENT FLEET PRIOR TO BID OPENING AT WHICH THEY WILL BE PUBLICLY OPENED.

IMPORTANT NOTICE: If you received this solicitation from the State's "Online Public Notice" web site, you must register with the Procurement Officer listed on this document to receive subsequent amendments. Failure to contact the Procurement Officer may result in the rejection of your offer.

BIDDER'S NOTICE: By signature on this form, the bidder certifies that:

- (1) the bidder has a valid Alaska business license, submits a bid under the name as appearing on the person's current Alaska business license and has written the license number below or has submitted one of the following forms of evidence of an Alaska business license with the bid:
 - a canceled check for the business license fee;
 - a copy of the business license application with a receipt date stamp from the State's business license office;
 - a receipt from the State's business license office for the license fee;
 - a copy of the bidder's valid business license;
 - a sworn notarized affidavit that the bidder has applied and paid for a business license;
- (2) the price(s) submitted was arrived at independently and without collusion and that the bidder is complying with:
 - the laws of the State of Alaska;
 - the applicable portion of the Federal Civil Rights Act of 1964;
 - the Equal Employment Opportunity Act and the regulations issued there under by the State and Federal Government;
 - all terms and conditions set out in this Invitation to Bid (ITB).

If a bidder fails to comply with (1) at the time designated in the ITB for opening the State will reject the bid. If a bidder fails to comply with (2) of this paragraph, the State may reject the bid, terminate the contract, or consider the contractor in default. Bids must be submitted under the name as appearing on the person's current Alaska business license in order to be considered responsive.

If a contract award is made by the State of Alaska, the undersigned offers and agrees to furnish materials, equipment and services in compliance with all terms and conditions specified in ITB/Contract. Submittal of this document with authorized signature constitutes full understanding and a promise to comply with all specifications, terms and conditions of ITB/Contract.

TO BE COMPLETED BY BIDDER:		
COMPANY SUBMITTING BID	ADDRESS	ALASKA BUSINESS LICENSE NO:
AUTHORIZED SIGNATURE	CITY, STATE, ZIP	DOES YOUR BUSINESS QUALIFY FOR THE ALASKA BIDDER'S PREFERENCE? [] YES [] NO
PRINTED NAME	PHONE/FAX	
DATE	E-MAIL ADDRESS	

SECTION I SPECIAL TERMS AND CONDITIONS

NOTE: This section will be used for Terms and Conditions that are "special" and/or unique to a particular ITB. The paragraphs in this section may change from bid to bid. Accordingly, bidders must review this section to insure compliance.

1.0 CONTRACT INTENT: This invitation to bid (ITB) is intended to result in the purchase of:

- 1.1 Intent: To purchase 6x4 8 CY trucks.
- 1.2 Contract Period: This contract period is for SIX MONTHS.
- 1.3 Quantities: UP TO TEN EACH over the contract period.
- 1.4 Location of Use: Various Alaska locations.
- 1.5 Warranty locations: Various Alaska locations.
- 1.6 Dealer warranty locations, at a minimum: Anchorage and Fairbanks.
- 1.7 In addition to the State of Alaska requirements, the Municipality of Anchorage and other Alaska political subdivisions may cooperatively purchase from the resulting contract. Refer to Section III – Special Terms and Conditions, "COOPERATIVE PURCHASING".
 - 1.7.1 At no time may the contractor change the terms and conditions, alter the price to another entity, which differs from the contractual price, nor charge undisclosed administrative fees to allow cooperative purchasing.

2.0 DELIVERY:

- 2.1 **Pre-delivery service:** Prior to delivery, each vehicle, piece of equipment or attachment shall be serviced and inspected by the dealer or his agent. A certification of this inspection must include the following (as applicable to the type of equipment):
 - 2.1.1 Dealer and vehicle identification.
 - 2.1.2 Check-off of service and inspection performed including a list of all fluids including type weight and specification that are in the equipment as delivered for all fluid compartments.
 - 2.1.3 The vehicle's crankcase, differential and transmission, and other fluid compartments shall be filled to the manufacturer's recommended capacity.
 - 2.1.4 Fuel tank shall be filled to at least register a minimum ¼ full on the fuel gauge, unless restricted by the commercial carrier, when the vehicle arrives at the delivery location.
 - 2.1.5 The vehicle shall be clean and free from defects when delivered and should be ready for immediate and continued use upon delivery.
 - 2.1.6 Units delivered in an incomplete state, or which have deficiencies per the specification, are subject to the damage charges as noted in paragraph 4.0 below.
- 2.2 **Delivery Receipt:**
 - 2.2.1 A delivery receipt will be required. The receipt must be filled out by the vendor, and acknowledged by state receiving personnel by signature and date of actual receipt of equipment. One copy of this delivery receipt is to be given to the state-receiving agency. The original shall accompany the vendor's invoice to support and properly identify the vehicle delivered.
 - 2.2.2 Vendors are cautioned and advised that such delivery forms or other receiving type documents will not in any way be construed to mean the state has formally and fully accepted unit(s) referenced thereon as complete and meeting every specification set forth. Only the Contracting Officer or designee may sign warranty documentation.

3.0 LINE SHEETS/BILL OF MATERIALS:

- 3.1 It is required within 30 days after delivery that the successful bidder provide a comprehensive listing of all components used to assemble the unit.
- 3.2 This includes any components installed by the manufacturer or any subcontractor or the successful bidder.

- 3.3 Information will include at a minimum, when available, make, model serial number on items such as engines, transmissions, axles, tires, bodies, etc. The listings will be specific to each piece of equipment and will be provided on an individual CD for each unit delivered.
- 3.4 A minimum of two (2) CD's per unit are to be provided and marked with the make, model, and last main numbers of the units serial number or State PO number.

4.0 F.O.B. POINT:

- 4.1 The F.O.B. point is as listed in Section IV, Bid Schedule. Ownership of and title will remain with the contractor until delivery is complete to final destination and accepted by the State.
- 4.2 The cost of shipping and delivery for orders beyond the limits of Seattle/Tacoma dock will be handled as follows. The contractor will prepay the shipping and delivery charges to any destination named by the State in its order. The contractor will charge-back those shipping and delivery charges to the State as a separate line item on the State's invoice.
- 4.3 All shipping charges over \$100 must be documented by a copy of the actual shipping invoice and received with the invoice charge to the State.

5.0 DAMAGES FOR LATE DELIVERY AND NON-CONFORMING GOODS:

- 5.1 Time is of the essence in this contract. The Bidder is expected to deliver goods that conform in all material respects to the contract specifications on or before the date provided therein, as may be amended by written agreement of the parties.
- 5.2 In the event that the equipment is delivered late or does not conform to the contract specifications, the State shall be entitled to offset against the Contract Price, as liquidated damages and not as a penalty, an amount equal to the cost of renting like equipment, multiplied by the number of calendar days elapsing between the delivery date provided in the bid schedule and the delivery date to the State. In the case of a truck of this class, that daily rental fee is determined to be \$190.00. The number of days for which liquidated damages shall apply shall include, in the case of non-conforming goods, the time reasonably necessary for the State to perform inspection.
- 5.3 These liquidated damages represent a reasonable estimate of amounts necessary to compensate the State for loss of use of the goods during the period in which the goods would have been available to the State if conforming goods had been timely delivered.

6.0 WARRANTY:

- 6.1 **Standard Warranty Package:** Unless otherwise stipulated by this ITB, the successful bidder will provide a one-year (12-month) warranty.
 - 6.1.1 Full (100%) Parts and Labor Warranty Coverage of all components for the first 12-months (one-year), at the assigned location, from the date the unit is placed in service.
 - 6.1.2 Corrosion Warranty: Twelve (12) year warranty for corrosion inside the cab leading to premature wear of the cab floor. The State is responsible to take every precaution to insure that the units are properly cleaned and chemicals removed during preventative maintenance.
 - 6.1.3 Full (100%) Warranty Coverage includes all cost of labor, parts, freight, transportation, per diem, travel, lubricants, miscellaneous cost, etc., to place the unit in like-new condition.
 - 6.1.4 Should the manufacturer's standard warranty exceed the minimum State warranty requirements, the manufacturer's warranty will run in conjunction with and enhance the State's warranty, then continue for the remainder of its term.
- 6.2 **General Warranty Requirements for all Equipment:**
 - 6.2.1 **Warranty Exceptions:**
 - 6.2.1.1 For clarification, warranty does not apply to normal wear and tear or maintenance items, accident damages, misuse of equipment or failure to operate or maintain equipment as prescribed by vendor/manufacture.
 - 6.2.2 **Warranty on Attachments:** Same as Standard Warranty Package.
 - 6.2.3 **In-Service Date:**

- 6.2.3.1 Warranty on vehicles not placed in service immediately upon receipt because of time lag to construct body components and/or installation of special equipment, or due to seasonal usage or other delay, shall be warranted from the date the vehicle is placed in service. The receiving agency shall notify the vendor/manufacturer in writing of the actual "in service" date. Notification of the requirement for delayed warranty will be provided on delivery orders whenever possible.
- 6.2.4 **Authorized Warranty Dealer (Contractor) and Subcontractor:** For the purpose of this bid, the contractor must meet the following applicable requirements:
- 6.2.4.1 Contractor (bidder) must:
- 6.2.4.1.1 possess a current Alaska Motor Vehicle Dealer License pursuant to AS 08.66.010 through AS 08.66.090, when offering motor vehicles, trailers or semi-trailers, and;
- 6.2.4.1.2 be a manufacturer(s) authorized warranty service dealer for each unit, and;
- 6.2.4.1.3 have the capability of providing warranty servicing and repair work within the State of Alaska, with authorized warranty repair facilities in Anchorage and Fairbanks at a minimum.
- 6.2.4.2 Contractor, if appropriate, shall submit the name, address, Alaska business license of any subcontractor who will provide the warranty servicing and repair work. The Contractor must also provide contractual documentation or agreements with the subcontractor insuring the state that the subcontractor will provide complete contract performance on behalf of the contractor as set forth in this ITB and verification that the work provided will maintain manufacturer's warranty requirements.
- 6.2.4.2.1 Approval of all subcontractors must take place prior to the bid opening.
- 6.2.4.2.2 The use of a subcontractor does not exclude the provisions as noted in paragraphs 3.3.4.1.1 through 3.3.4.1.3 as requirements to the contractor.
- 6.2.5 **Warranty Claims:**
- 6.2.5.1 Warranty will be provided at the unit's assigned (in-service) location as shown in this ITB, Section V - Bid Price Schedule. Because of the remote location of some equipment it is not always practical to deliver equipment to authorized warranty repair facilities. In these cases, the vendor may perform warranty work at the state's location or, the State of Alaska, at its discretion, reserves the right to perform the warranty work and be reimbursed by the vendor.
- 6.2.5.2 The State of Alaska has established a warranty procedure whereby the vendor is to be notified via letter, telex, fax, telegram, etc. that warranty work needs to be performed. If time is of the essence, a telephone call confirmed by one of the above written procedures may be utilized. The vendor must notify the state immediately that it will begin to perform the warranty work at the equipment location within 48 hours from receipt of written notification. The State may, at its discretion, proceed to make warranty repairs with its own work force in the case of emergency situation or to preclude excessive downtime (greater than 48 hours).
- 6.2.5.3 Failure to notify the State, that the vendor intends to begin to perform warranty work promptly under this paragraph, by the end of the business day following the states notification that work is required to be performed, is considered a contractual breach.
- 6.2.6 The vendor will be invoiced for required warranty work performed by the state. The shop rate to be charged for warranty work performed by the state will be \$84.00 per hour. Labor hours to be charged will be in accordance with appropriate flat rate manuals. If flat rate manuals do not cover the labor operation, actual repair time will be used. Warranty work performed by state shop personnel at locations where no shop personnel are permanently stationed may be subject to travel expenses incurred involving those warranty repairs.
- 6.2.7 Factory Recall:

- 6.2.7.1 Nationwide factory recall or product update programs are the responsibility of the vendor and/or manufacturer. The State will attempt to bring affected equipment to an authorized repair facility. However, because of the remoteness of some equipment this is not always practicable or economical. In such cases, factory recall and modification work will be handled the same as warranty work. Factory recall notices sent to the state should, in addition to serial number, include model, year, and dealer from whom purchased.

7.0 PUBLICATIONS:

- 7.1 Paper publications are to be received by the State of Alaska no later than 10 days after receipt of the unit. Custom manuals may be delivered no later than 90 days after receipt of the unit. Delivery will not be considered complete until the publications for each unit have been received by the State of Alaska. Note: Publications, when required, will be ordered on the same Purchase Order as the unit itself.

7.1.1 All paper manuals are to be pre-assembled in factory binders prior to delivery.

7.2 Service Manuals:

7.2.1 Complete set(s) to include applicable information covering prime unit and attachments:

7.2.2 Body, chassis, and electrical

7.2.3 Engine, transmission, and differential(s) (service and rebuild)

7.2.4 Electrical and vacuum troubleshooting

7.2.5 Wiring diagrams

7.2.6 Service specifications

7.2.7 Engine/emission diagnosis

7.3 Parts Manuals:

7.3.1 Complete set(s) including all updates. If updates are not provided during the warranty period, the State may order them from the manufacturer and bill the contractor for the full cost, including shipping.

7.3.2 Parts manuals are to be customized by serial number.

7.4 **Operator's Manuals:** Complete set(s) to include prime unit and attachments.

7.5 **Quantities:** As per Section IV – Bid Price Schedule.

7.6 **Manuals:** To be delivered to, and receipt signed by person(s) as noted on the Purchase Order.

7.7 **Service Bulletins, Etc.:** The successful bidder must provide appropriate service bulletins, technical support bulletins, service letters, product support bulletins, and/or any other information type notifications that are sent out to the vendor or used by the manufacturer in the maintenance and report of the vehicle, equipment or attachments being provided. The intent of this clause is that the State of Alaska be provided notification of any and all changes or improvements that may affect the maintenance, reliability, longevity, and safety of our equipment. This information will be provided as soon as possible to person(s) as noted on the Purchase Order.

8.0 STATEMENT OF ORIGIN: The bidder will be required to furnish a Manufacturer's Statement of Origin for Automotive or Non-Automotive rolling stock for each unit. All such documents shall be forwarded to:

DOT&PF, HQ State Equipment Fleet
2200 E. 42nd Avenue Room #311
Anchorage, Alaska 99508

9.0 WEIGHT VERIFICATION SLIPS: If required in the Bid Price Schedule, a weight scale ticket of the completed unit will be included with the Statement of Origin.

10.0 INSPECTIONS:

- 10.1 The State's inspection of all materials and equipment upon delivery is for the sole purpose of identification. Such inspection shall not be construed as final or as acceptance of the materials or equipment if materials or equipment do not conform to Contract requirements. If there are any apparent defects in the materials

or equipment at the time of delivery, the State will promptly notify the Contractor thereof. Without limiting any other rights of the State, The State at its option, may require the Contractor to:

- 10.1.1 Repair or replace at Contractor's expense, any or all of the damaged goods,
 - 10.1.2 refund the price of any or all of the damaged goods, or
 - 10.1.3 accept the return of any or all of the damaged goods.
- 10.2 Costs of remedying all defects, indirect and consequential costs of correcting same, and/or removing or replacing any or all of the defective materials or equipment will be charged against the Bidder.

11.0 PRICE:

- 11.1 **Price Guarantee:** The Contractor is responsible to maintain prices under the contract firm for 90 days after bid opening. All price increases or decreases must remain firm for the following 90 days.
- 11.2 **NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED.**

12.0 MANUFACTURER'S REBATE (INCENTIVES): In any circumstance during or prior to completion of the contract, whereupon the State of Alaska becomes eligible to receive a rebate for any vehicle purchased under this contract, it shall be the BIDDER'S responsibility to inform the Contracting officer in writing and to advise the procedures for obtaining such rebates.

13.0 REPLACEMENT PARTS:

- 13.1 The State of Alaska shall expect the dealer or manufacturer to provide replacement wear parts at their authorized warranty facilities for the entire warranty period within seven (7) days of order. All other parts must be available within ten (10) working days.
- 13.2 Back order procedures: Back orders are acceptable; however, the ordering shop shall be appraised at time of original orders as to the expected delay in delivery.
- 13.3 Warranty: All products supplied by the contractor shall be warranted against defects in materials and workmanship for a minimum of 90 days, commencing at the time of installation as long as the installation is within 12 months of purchase. The cost of any defective product and the labor required to replace the defective product shall be the obligation of the contractor.
- 13.3.1 If the manufacturer's warranty exceeds the stated warranty then manufacturer's warranty supersedes.
 - 13.3.2 Parts Return: Within 12 months of purchase, the State is to be allowed to return new, parts with full refund, less shipping charges.
 - 13.3.3 Invoicing: Full description of item is required on all invoices, packing lists and billings.

SECTION II STANDARD TERMS AND CONDITIONS

- 1.0 INVITATION TO BID (ITB) REVIEW:** Bidders shall carefully review this ITB for defects and questionable or objectionable material. Bidders' comments concerning defects and questionable or objectionable material in the ITB must be made in writing and received by the purchasing authority at least ten (10) days before the bid opening date. This will allow time for an amendment to be issued if one is required. It will also help prevent the opening of a defective bid, upon which award cannot be made, and the resultant exposure of bidders' prices. Bidders' original comments should be sent to the purchasing authority listed on the front of this ITB.
- 2.0 BID FORMS:** Bidders shall use this bid and attached forms when submitting bids. A photocopied bid may be submitted.
- 3.0 SUBMITTING BIDS:** Envelopes containing bids must be sealed, marked, and addressed as shown in the example below. Do not put the ITB number and opening date on the envelope of a request for bid information. Envelopes with ITB numbers annotated on the outside will not be opened until the scheduled bid opening.

Bidder's Return Address	STAMP
Department of Transportation & Public Facilities HQ State Equipment Fleet 2200 E. 42nd Avenue, Room #311 Anchorage, AK 99508	
Bid No.: SEF- _____	
Opening Date: _____	

4.0 FORMAL WORKSHOP: (Attendance is Mandatory IF a workshop is scheduled)

The Formal Workshop (Pre-Bid) is to discuss with prospective bidders the "draft" Invitation to Bid (ITB). The formal workshop is the only opportunity for prospective bidders, manufacturers and other interested parties, in a conference setting, to discuss Standard Terms and Conditions, Special Terms and Conditions, Specifications, and to provide clarification as needed for this ITB. **All bidders (a representative from the bidding company) must attend in person or by teleconference in order to bid.**

Formal workshops are for information only. Any statements made at formal workshops will not be official until verified in the "final" ITB. Participation by teleconference may be possible by making arrangements with the SEF Contracting Office in advance.

- 5.0 TIMELINESS OF BID:** Sealed bids must be received and time-stamped by the Procurement Office prior to the time set for receipt of bids. Bids received after bid-closing time will not be considered. Bidders must ensure that their bid and any amendments requiring signature are delivered prior to the scheduled bid opening time. **LATE BIDS WILL NOT BE ACCEPTED.**
- 6.0 FILING A PROTEST:** A bidder may protest the award of a contract or the proposed award of a contract for supplies, services, or professional services. The protest must be filed in writing and include the following information: (1) the name, address, and telephone number of the protester; (2) the signature of the protester or the protester's representative; (3) identification of the contracting agency and the solicitation or contract at issue; (4) a detailed statement of the legal and factual grounds of the protest, including copies of relevant documents; and (5) the form of relief requested. Protests will be treated in accordance with Alaska Statutes (AS)36.30.560-36.30.610.
- 7.0 AUTHORITY:** This ITB is written in accordance with AS 36.30 and 2 AAC 12.
- 8.0 COMPLIANCE:** In the performance of a contract that results from this ITB, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; and be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

- 9.0 SUITABLE MATERIALS, ETC.:** Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, and of the latest edition, version, model or crop and of recent manufacture.
- 10.0 SPECIFICATIONS:** Unless otherwise specified in the ITB, product brand names or model numbers specified in this ITB are examples of the type and quality of product required, and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.
- 11.0 FIRM OFFER:** For the purpose of award, offers made in accordance with this ITB must be good and firm for a period of ninety (90) days from the date of bid opening.
- 12.0 EXTENSION OF PRICES:** In case of error in the extension of prices in the bid, the unit prices will govern; in a lot bid, the lot prices will govern.
- 13.0 BID PREPARATION COSTS:** The State is not liable for any costs incurred by the bidder in bid preparation.
- 14.0 CONSOLIDATION OF AWARDS:** Due to high administrative costs associated with processing of purchase orders, a single low bid of \$50 or less may, at the discretion of the State, be awarded to the next low bidder receiving other awards for consolidation purposes. This paragraph is not subject to the protest terms enumerated in "INSTRUCTION TO BIDDERS", "FILING A PROTEST" above.
- 15.0 CONTRACT FUNDING:** Bidders are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.
- 16.0 CONFLICT OF INTEREST:** An officer or employee of the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if (1) the officer or employee is an employee of the administrative unit that supervises the award of this contract; or (2) the officer or employee has the power to take or withhold official action so as to affect the award or execution of the contract.
- 17.0 ASSIGNMENT(S):** Assignment of rights, duties, or payments under a contract resulting from this ITB is not permitted unless authorized in writing by the State of Alaska, Department of Administration, Division of General Services. Bids that are conditioned upon the State's approval of an assignment will be rejected as nonresponsive.
- 18.0 SUBCONTRACTOR(S):** Within five (5) working days of notice, the apparent low bidder must submit a list of the subcontractors that will be used in the performance of the contract. The list must include the name of each subcontractor and the location of the place of business for each subcontractor and evidence of each subcontractor's valid Alaska business license. Subcontractors can only be changed per AS 36.30.115 (b).
- 19.0 FORCE MAJEURE:** (Impossibility to perform) The contractor is not liable for the consequences of any failure to perform, or default in performing, any of its obligations under this Agreement, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the contractor. For the purposes of this Agreement, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.
- 20.0 LATE BIDS:** Late bids are bids received after the time and date set for receipt of the bids. Late bids will not be accepted.
- 21.0 CONTRACT EXTENSION:** Unless otherwise provided in this ITB, the State and the successful bidder/contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.

- 22.0 DEFAULT:** In case of default by the contractor, for any reason whatsoever, the State of Alaska may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.
- 23.0 DISPUTES:** Any dispute arising out of this agreement shall be resolved under the laws of Alaska. Any appeal of an administrative order or any original action to enforce any provision of this agreement or to obtain any relief from or remedy in connection with this agreement may be brought only in the superior court for the State of Alaska.
- 24.0 CONSUMER ELECTRICAL PRODUCT:** AS 45.45.910 requires that "...a person may not sell, offer to sell, or otherwise transfer in the course of the person's business a consumer electrical product that is manufactured after August 14, 1990, unless the product is clearly marked as being listed by an approved third party certification program." Electrical consumer products manufactured before August 14, 1990, must either be clearly marked as being third party certified or be marked with a warning label that complies with AS 45.45.910(e). Even exempted electrical products must be marked with the warning label. By signature on this bid the bidder certifies that the product offered is in compliance with the law. A list of approved third party certifiers, warning labels and additional information is available from: Department of Labor and Workforce Development, Labor Standards & Safety Division, Mechanical Inspection Section, P.O. Box 107020, Anchorage, Alaska 99510-7020, (907)269-4925.
- 25.0 SEVERABILITY:** If any provision of the contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and, the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.
- 26.0 ORDER DOCUMENTS:** Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The State is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the State under this ITB. The State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.
- 27.0 BILLING INSTRUCTIONS:** Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order, not to the Division of General Services. The ordering agency will make payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.
- 28.0 CONTINUING OBLIGATION OF CONTRACTOR:** Notwithstanding the expiration date of a contract resulting from this ITB, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.
- 29.0 ALASKA BUSINESS LICENSE AND OTHER REQUIRED LICENSES:** At the time the bids are opened, all bidders must hold a valid Alaska business license and any necessary applicable professional licenses required by Alaska Statute. Bids must be submitted under the name as appearing on the person's current Alaska business license in order to be considered responsive. Bidders should contact the Department of Commerce, Community and Economic Development, Division of Corporations, Business, and Professional Licensing, P. O. Box 110806, Juneau, Alaska 99811-0806, for information on these licenses. Bidders must submit evidence of a valid Alaska business license with the bid.

You are not required to hold a valid Alaska business license at the time bids are opened if you possess one of the following licenses and are offering services or supplies under that specific line of business:

- fisheries business licenses issued by Alaska Department of Revenue or Alaska Department of Fish and Game,
- liquor licenses issued by Alaska Department of Revenue for alcohol sales only,
- insurance licenses issued by Alaska Department of Commerce, Community and Economic Development, Division of Insurance, or
- Mining licenses issued by Alaska Department of Revenue.

- 29.0 ALASKAN BIDDER'S PREFERENCE:** Award will be made to the lowest responsive and responsible bidder after an Alaskan bidder's preference of five percent (5%) has been applied. The preference will be given to a person who: (1) holds a current Alaska business license; (2) submits a bid for goods or services under the name on the Alaska business license; (3) has maintained a place of business within the state staffed by the bidder, or an employee of the bidder, for a period of six months immediately preceding the date of the bid; (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship and the proprietor is a resident of the state, is a limited liability company organized under AS 10.50 and all members are residents of the state, or is a

partnership under AS 32.05 or AS 32.11 and all partners are residents of the state; and, (5) if a joint venture, is composed entirely of venturers that qualify under (1) - (4) of this subsection. AS 36.30.170(b).

- 30.0 USE OF LOCAL FOREST PRODUCTS:** In a project financed by state money in which the use of timber, lumber and manufactured lumber is required, only timber, lumber and manufactured lumber products originating in this state shall be used unless the use of those products has been determined to be impractical, in accordance with AS 36.15.010.
- 31.0 LOCAL AGRICULTURAL AND FISHERIES PRODUCTS PREFERENCE:** When agricultural, dairy, timber, lumber, or fisheries products are purchased using state money, only those products harvested in Alaska, or in the case of fisheries products harvested or processed within the jurisdiction of Alaska, will be purchased, provided they are available, of comparable quality, and priced no more than seven percent (7%) higher than products harvested outside the state, or in the case of fisheries products harvested or processed outside the jurisdiction of the state, in accordance with AS 36.15.050.
- 32.0 ALASKA PRODUCT PREFERENCE:** A bidder that designates the use of an Alaska Product which meets the requirements of the ITB specification and is designated as a Class I, Class II or Class III Alaska Product by the Department of Community & Economic Development shall receive a preference in the bid evaluation in accordance with AS 36.30.332 and 3 AAC 92.010.
- 33.0 EMPLOYMENT PROGRAM PREFERENCE:** If a bidder qualifies for the Alaskan bidder's preference, under AS 36.30.170(b), and is offering goods or services through an employment program, as defined under 36.30.990(10), and is the lowest responsive and responsible bidder with a bid that is no more than fifteen percent (15%) higher than the lowest bid, the procurement officer will make the award to that bidder, in accordance with AS 36.30.170(c) and 2 AAC 12.050.
- 34.0 ALASKANS WITH DISABILITIES PREFERENCE:** If a bidder qualifies for the Alaskan bidder's preference, under AS 36.30.170(b), is a qualifying entity as defined in AS 36.30.170(e) and (j), and is the lowest responsive and responsible bidder with a bid that is no more than ten percent (10%) higher than the lowest bid, the procurement officer will make the award to that bidder, in accordance with AS 36.30.170(e).
- 35.0 EMPLOYERS OF PEOPLE WITH DISABILITIES PREFERENCE:** If a bidder qualifies for the Alaskan bidder's preference, under AS 36.30.170(b), and, at the time the bid is submitted, employs a staff that is made up of fifty percent (50%) or more people with disabilities, as defined in AS 36.30.170(j), and submits a responsive and responsible bid that is no more than ten percent (10%) higher than the lowest responsive and responsible bid, the procurement officer will make the award to that bidder, in accordance with AS 36.30.170(f).
- 36.0 PREFERENCE QUALIFICATION LETTER:** Regarding preferences 5, 6, and 7 above, the Division of Vocational Rehabilitation in the Department of Labor and Workforce Development maintains lists of Alaskan; [1] employment programs that qualify for preference, [2] individuals who qualify for preference as Alaskan's with disabilities, and, [3] employers who qualify for preference as employers of people with disabilities. In accordance with AS 36.30.170(j), in order to qualify for one of these preferences, a bidder must add value by actually performing, controlling, managing, and supervising the services provided, or for supplies, a bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.
- 37.0** As evidence of an individual's or a business' right to a certain preference, the Division of Vocational Rehabilitation will issue a certification letter. To take advantage of the preferences 5, 6, or 7 above, an individual or business must be on the appropriate Division of Vocational Rehabilitation list, at the time the bid is opened, and must provide the procurement officer a copy of their certification letter. Bidders must attach a copy of their certification letter to their bid. The bidder's failure to provide the certification letter mentioned above, with their bid, will cause the State to disallow the preference.
- 38.0 METHOD OF AWARD:**
- 38.1 DOT/PF is required by law to award "to the lowest responsive and responsive bidder whose bid conforms in all MATERIAL respects to the requirements and criteria set out in the invitation to bid." AS 36.30.170.
- 38.2 All specifications in this ITB are important and bidders should carefully address each item. Deviation from a specification MAY result in rejection of a bid at the discretion of the Contracting Officer if the deviation is material. A material deviation is one that is significantly different from an essential aspect of a specification.

- 38.3 The Contracting Officer may be justified in accepting a non-material deviation - it will be determined upon the facts, circumstances, and the proposal in the bid. If a bid deviation has a negligible effect on price, quality, performance, delivery or contract conditions, it is not material and may be waived or corrected by the Contracting Officer. The State reserves the right to waive minor informalities or technical defects, which are not material, when such waiver is in the best interest of the State.
- 38.4 Nothing in this section shall be construed as depriving the State of its discretion in the matter of determining the lowest responsible bidder.
- 38.5 A Notice of Intent to Award (ITA) will be issued for all solicitations in accordance with regulations. The notice of intent to award does not constitute a formal award of a contract. Formal award is achieved through execution of the "Offer and Contract Award" section of the Invitation to Bid.

39.0 BID FORMAT:

- 39.1 Bid submitted must contain, as a minimum:
 - 39.1.1 COVER PAGE
 - 39.1.2 BID PRICE SCHEDULE.
 - 39.1.3 ASTERISKED (*) ITEM PAGES ONLY (AND/OR) LETTER OF CLARIFICATION ADDRESSING ASTERISKED (*) ITEMS.
 - 39.1.4 All pertinent amendments.
- 39.2 Failure to return all of the pages listed above will cause your bid to be rejected.
- 39.3 Bids must conform to the requirements of the Invitation to Bid or Request for Proposal. All necessary attachments (bid bonds, references, descriptive literature, etc.) must be submitted with the bid and in the required format. Failure to comply with all requirements shall result in a non-responsive bid.
- 39.4 Faxed or e-mail transmitted bids ARE NOT ACCEPTED.

40.0 SIGNATURE ON BID: AN OFFICIAL OF THE BIDDING ORGANIZATION authorized to bind the bidder to its provisions MUST SIGN THE BID IN INK. Signature certifies that the bidder has read and fully understands and agrees to all bid specifications, terms and conditions.

41.0 PRODUCT LITERATURE:

- 41.1 **ANNOTATED LITERATURE:** Bidders must annotate their product literature to identify for the State the location of the supporting information regarding each product specification set out in this ITB. A bidder's failure to comply with this clause, within the time set by the State, will cause the State to consider the offer non-responsive and reject the bid.
- 41.2 Product brochures, descriptive literature and other supporting documentation may be required in some solicitations. Descriptive literature is for the purpose of providing a reference to the product offered. While it is not practicable to require documentation to support every single item of a specification, it is sometimes necessary to require the bidder to provide product literature that will help the Contracting officer to determine the bidder's compliance with important specifications.
- 41.3 Requirements for product literature will vary from bid to bid. Certain specification items may be marked with an asterisk (*) indicating that descriptive literature or supporting documentation (such as a letter of clarification) will be required.
- 41.4 When product literature is required by the ITB, please provide a minimum of one (1) complete set to aid in bid review and evaluation.
- 41.5 Failure to provide product literature or brochures when required WILL result in your bid being deemed non-responsive.
- 41.6 A bidder's signature on the contract offer and award is taken as a promise to comply with the ITB specifications. In case of a difference between the literature and the specifications, the specifications will govern.
- 41.7 The State does not honor disclaimer statements often evident in manufacturer's published specification sheets or brochures. Such disclaimers will not release the successful bidder from providing the specified item, at the time of acceptance by the State.

42.0 CLARIFICATION OF OFFER:

- 42.1 A letter of clarification is required to explain any deviations from terms, conditions, or specifications of this ITB. Offers exceeding ITB specifications are regarded as deviations and should be clarified.
- 42.2 In order to prevent technical errors, following each asterisked is space that shall be used to address all of the asterisked items. It is **mandatory** that a letter of clarification or the space behind the asterisked items be used to supply the required information.
- 42.3 When using a letter of clarification, or the space provided within the ITB, to address an asterisked (*) item, the statement must indicate specifically what is being provided. Do not include statements such as "Complies to Spec", or "Meets or Exceeds Specifications". This will be considered a non-responsive response.
- 42.4 Letters of Clarification are to be on company (Bidder's) letterhead and be signed. The only information in the Letters of Clarification should be the explanation(s) of deviation(s) and/or responses to asterisked (*) items. Asterisked (*) item explanations should refer to that particular specification item number.
- 42.5 Letters of disclosure and clarification must be made part of the sealed bid.
- 43.0 PRODUCT IDENTIFICATION:** Bidders must clearly identify all products bid. Brand name and model or number must be shown for the prime unit as well as attachments where applicable. The State reserves the right to reject any bid when the product information submitted with the bid is incomplete and/or is not easily ascertainable from the bid documents or through independent verification.
- 44.0 PRODUCT EQUIVALENT SUBSTITUTION:** Bidders may submit bids for substantially equivalent products unless the Invitation to Bid provides that a specific brand is necessary because of compatibility requirements. In those instances where the ITB specifies "a name brand or State approved equivalent", bidders must request approval of a product equivalent substitution NO LATER THAN the formal workshop meeting. A written response will be provided by the Contracting Officer. Any requests for product equivalent substitution after the Formal Workshop Meeting, in all likelihood, will not be considered.
- 45.0 BRAND AND MODEL OFFERED:** Unless otherwise specified, when brand names and model numbers are used to specify the type and quality of the goods desired, bidders must clearly indicate the brand names and model numbers they intend to provide. The bidder's failure to identify the brand and model offered will cause the State to consider the offer non-responsive and reject the bid.
- 46.0 BID MODIFICATION:**
- 46.1 Modifications or erasures made before bid submission should be initialed in ink by the person signing the bid. A bid may be rejected if it contains a material alteration or erasure, which is not initialed by the signer of the bid and the intent of the bidder, is not reasonably ascertainable from the bid as submitted.
- 46.2 Bids, once submitted, may be modified in writing before the time and date set for bid opening. Any modifications shall be prepared on company letterhead, signed by an authorized representative, and state that the new document supersedes or modifies the prior bid. Modification must be submitted in a sealed envelope clearly marked "Bid Modification" and identifying the bid number and closing date and time. Bidders may not modify bids after bid opening time.
- 47.0 BID WITHDRAWALS:** Bids may be withdrawn in writing on company letterhead signed by an authorized representative and received by the Procurement Office prior to bid closing time. Bids may also be withdrawn in person before bid opening time upon presentation of appropriate identification.
- 48.0 NON-RESPONSIVE BIDS:**
- 48.1 Bids will be considered non-responsive and shall be rejected for the following:
- 48.1.1 Failure to sign the bid.
 - 48.1.2 Failure to return all pages of the bid document and any/all pertinent amendments.
 - 48.1.3 Failure to submit the bid at the place and time required in the solicitation.
 - 48.1.4 Failure to have a valid Alaska Business License at the time of bid opening.
 - 48.1.5 Failure to acknowledge amendments requiring signature.
 - 48.1.6 Failure to provide product literature, brochures, or a letter of clarification, when specifically required by the Invitation to Bid.
 - 48.1.7 Bids which specify "Offered Delivery Time" in excess of "Required Delivery" number of calendar days after the receipt of an order.

49.0 CERTIFICATION OF COMPLIANCE WITH AMERICAN'S WITH DISABILITIES ACT OF 1990:

- 49.1 By signature of their bid/proposal the bidder/proposer certifies that they comply with the American's with Disabilities Act of 1990 and the regulations issued there under by the federal government.
- 49.2 Services or activities furnished to the general public on behalf of the State must be fully accessible. This is intended to ensure that agencies are in accordance with 28 CFR Part 35 Section 35.130 and that services, programs or activities furnished to the public through a contract do not subject qualified individuals with a disability to discrimination based on the disability.

50.0 ACCESSORIES: When accessories are supplied, they must be certified to be compatible with the rest of the equipment. Certification will be written evidence satisfactory to the State that the accessories are compatible. The bidder's failure to supply this evidence within the time required by the State will cause the State to consider the bid non-responsive and reject the bid.

51.0 ALTERATIONS: The contractor must obtain the written approval from the contracting officer prior to making any alterations to the specifications contained in this ITB. The State will not pay for alterations that are not approved in advance and in writing by the contracting officer.

52.0 AMENDMENTS: Contract terms shall not be waived, altered, modified, supplemented or amended without prior written approval of the Contracting officer.

53.0 ASSIGNMENT: A bidder may not assign any portion of a contract unless authorized in advance and in writing by the Contracting officer.

54.0 AUTHORITY: This solicitation is written in accordance with Alaska statutes AS 36.30 and 2 AAC 12.

55.0 BID PREPARATION COSTS: The State is not responsible for any costs incurred by the bidder in preparation of his bid.

56.0 COMPLIANCE WITH ALL GOVERNMENT REGULATIONS: The bidder must comply with all applicable federal, state, and borough regulations, codes, and laws, and pay all applicable federal, state, and borough taxes, and is liable for all required insurance, licenses, permits, and bonds. Failure to comply with such requirements shall constitute a breach of contract and shall be grounds for contract cancellation. Damages or costs resulting from noncompliance shall be the sole responsibility of the bidder.

57.0 CONFLICT OF INTEREST: A person employed by the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if they are an employee of the administrative unit that supervises the award of this contract or they have the power to take or withhold official action to affect the contract.

58.0 DEFAULT: In case of bidder default, the State may procure the goods or services from another source and hold the bidder responsible for any resulting excess costs and may seek other remedies under law or equity. Alaska Statutes and Regulations provide for suspension and disbarment of non-responsible bidders.

59.0 DELIVERY: All deliveries shall be F.O.B. final destination point with all transportation and handling charges paid by bidder. Responsibility and liability for loss or damage shall remain with bidder until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and bidder's warranty obligations.

60.0 DISCONTINUED ITEMS: In the event an item is discontinued by the manufacturer during the life of the contract, another item may be substituted, provided that the contracting officer makes a written determination that it is equal or better than the discontinued item and provided that it is sold at the same price or less than the discontinued item.

61.0 DISPUTES: Any disputes arising out of this solicitation shall be resolved under the laws of Alaska. An appeal or any original action to enforce any provision of this agreement must be in the superior court for the First Judicial District of Alaska.

62.0 FIRM, UNQUALIFIED AND UNCONDITIONAL OFFER: Bidders must provide enough information with their bid to constitute a definite, firm, unqualified and unconditional offer. To be responsive a bid must constitute a definite, firm, unqualified and unconditional offer to meet all of the material terms of the ITB. Material terms are those, which could affect price, quantity, quality, or delivery. Also included, as material terms are those, which are clearly identified in the ITB and which, for reasons of policy, must be complied with at risk of bid rejection for non-responsiveness.

63.0 FORCE MAJEURE (Impossibility to perform): Neither party to this contract shall be held responsible for delay or default caused by acts of God and/or war, which is beyond that party's reasonable control. The State may terminate this contract upon written notice after determining such delay or default will reasonably prevent successful performance of the contract.

64.0 HUMAN TRAFFICKING:

- 64.1 By signature on this contract, the offeror certifies that:
- 64.1.1 the offeror is not established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report; or
 - 64.1.2 if the offeror is established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report, a certified copy of the offeror's policy against human trafficking must be submitted to the State of Alaska prior to contract award.
- 64.2 The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: www.state.gov/g/tip/
- 64.3 Failure to comply with this requirement will cause the state to reject the bid or proposal as non-responsive, or cancel the contract.
- 64.4 This pertains to goods and services above \$50,000.00.

65.0 INDEMNIFICATION: The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

66.0 INSPECTIONS: Goods furnished under this contract are subject to inspection and test by the State at times and places determined by the State. If the State finds goods furnished to be incomplete or not in compliance with bid specifications, the State may reject the goods and require bidder to either correct them without charge or deliver them at a reduced price, which is equitable under the circumstances. If bidder is unable or refuses to correct such goods within a time deemed reasonable by the State, the State may cancel the order in whole or in part. Nothing in this paragraph shall adversely affect the State's rights as buyer, including all remedies and rights granted by Alaska statutes.

67.0 INSURANCE:

- 67.1 Without limiting Contractor's indemnification, it is agreed that Contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the Contracting Officer prior to beginning work and must provide for a 30-day prior notice of cancellation, nonrenewal or material change of conditions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the Contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.
- 67.2 Proof of insurance is required for the following:
- 67.2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.
 - 67.2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.
 - 67.2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.

- 67.3 Failure to supply satisfactory proof of insurance within the time required will cause the State to declare the bidder nonresponsive and to reject the bid.
- 68.0 ITEM UPGRADES:** The State reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.
- 69.0 NEW EQUIPMENT:** Equipment offered in response to this ITB must be new equipment. New equipment means equipment that is currently in production by the manufacturer and is still the latest model, edition or version generally offered. The equipment must be warranted as new by the manufacturer and may not have been used for any purpose, other than display (not demonstration), prior to its sale to the State. The State will not accept remanufactured, used or reconditioned equipment, including used or reconditioned components or parts of. It is the contractor's responsibility to ensure that each piece of equipment delivered to the State complies with this requirement. A contract's failure to comply with this requirement will cause the State to seek remedies under breach of contract.
- 70.0 PAYMENT:** Payment for agreements under \$500,000 for the undisputed purchase of goods or services provided to a State agency will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement, which establishes a lower interest rate or precludes the charging of interest.
- 71.0 PRICE EXTENSION:** In case of error in the extension of prices in the bid, the unit prices will govern.
- 72.0 PRICES:** The bidder shall state prices according to the requirements of this ITB. Prices quoted for commodities or services must be in U.S. funds and include applicable federal duty, brokerage fees, packaging, and transportation cost to the FOB point so that upon transfer of title the commodity or service can be utilized without further cost.
- 73.0 PROTESTS:** A bidder may protest the Intent to Award a contract pursuant to this Invitation to Bid in accordance with provisions in Alaska Statute AS 36.30.560. The protest must be filed in writing within ten (10) days of the notice of Intent to Award, and must include the following information: (1) the name, address, and telephone number of the protester; (2) the signature of the protester or the protester's representative; (3) identification of the contracting agency and the solicitation or contract at issue; (4) a detailed statement of the legal and factual grounds of the protest, including copies of relevant documents; and (5) the form of relief requested. Protests must be filed with: Contracting officer, State Equipment Fleet Purchasing, 2200 East 42nd Ave, Room #311, Anchorage, AK 99508. Protests and any subsequent appeal will be processed per AS 36.30.
- 74.0 QUANTITIES:** The State reserves the right to reduce or increase the quantity of items ordered under any contract resulting from this Invitation to Bid.
- 75.0 REJECTION OF BIDS:** All bids or proposals may be rejected prior to award for the following reasons:
- 75.1 the supplies or services being procured are no longer required;
 - 75.2 ambiguous or otherwise inadequate specifications were part of the solicitation;
 - 75.3 the solicitation did not provide for consideration of all factors of significance to the State;
 - 75.4 prices exceed available money and it would not be appropriate to adjust quantities to accommodate available money;
 - 75.5 all otherwise acceptable bids or proposals received are at unacceptable prices;
 - 75.6 there is reason to believe that the bids or proposals may not have been independently arrived at in open competition, may have been collusive, or may have been submitted in bad faith; or
 - 75.7 the award is not in the best interests of the State.
- 76.0 SEVERABILITY:** If any provision of this contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected.
- 77.0 SHIPPING DAMAGE:** The State will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The State will provide the contractor with written notice when damaged goods are received.
- 78.0 SIGNATURE ON BID: BIDS MUST BE SIGNED IN INK BY AN OFFICIAL OF THE BIDDING ORGANIZATION** authorized to bind the bidder to its provisions. Signature certifies, under penalty of perjury under the laws of the United States, that the price(s) submitted was/were independently arrived at without collusion, and that neither bidder nor bidder's firm, association or corporation of which bidder is a member, has either directly or indirectly,

entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this bid per 2AAC12.800.

79.0 STANDARD AND SPECIAL TERMS AND CONDITIONS: The terms and conditions of this section are standard to State of Alaska, Department of Transportation and Public Facilities, Statewide Equipment Fleet contracts for the purchase of goods. There may also be other special terms and conditions in an Invitation to Bid or Request for Proposal which apply only to this contract. In the event of a conflict between the standard and special terms and conditions, the Special Terms and Conditions take precedence.

80.0 SUCCESSORS IN INTEREST: This contract shall be binding upon successors and assigns.

81.0 SUITABLE MATERIALS: All materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, and suitable for the manufacturer's intended purpose unless the specifications allow for used, rebuilt or remanufactured equipment.

82.0 SUPPORTING INFORMATION:

82.1 The State strongly desires that bidders submit all required technical, specification, and other supporting information with their bid, so that a detailed analysis and determination can be made, by the contracting officer that the product offered meets the ITB specifications and that other requirements of the ITB have been met. However, provided a bid meets the requirements for a definite, firm, unqualified, and unconditional offer, the State reserves the right to request supplemental information from the bidder, after the bids have been opened, to ensure that the products offered completely meet the ITB requirements. The requirement for such supplemental information will be at the reasonable discretion of the State and may include the requirement that a bidder will provide a sample product(s) so that the State can make a first-hand examination and determination.

82.2 A bidder's failure to provide this supplemental information or the product sample(s), within the time set by the State, will cause the State to consider the offer non-responsive and reject the bid.

83.0 TAXES: Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the State, the bidder may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax because articles purchased are for the exclusive use of the State of Alaska.

84.0 USE OF BRAND OR TRADE NAMES: Brand or trade names used by the State in bid specifications are for the purpose of describing and establishing the standard of quality, performance and characteristics desired and are not a statement of preference nor are they intended to limit or restrict competition. Bidders may submit bids for substantially equivalent products to those designated unless the Invitation to Bid provides that a specific brand is necessary because of compatibility requirements. All such brand substitutions shall be subject to the State's approval.

85.0 WARRANTY: Unless otherwise stated, all equipment shall be new and current model and shall carry full factory warranties. Bidder warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with bid specifications. All implied or expressed warranty provisions of the Uniform Commercial Code apply. All warranties shall be for and benefit the State

86.0 BRAND NAME SPECIFICATION: For purposes of this ITB, certain vehicle accessories are specifically identified by brand name and model/part number. Only the listed brand name and model/part numbers are acceptable. Substitutes shall be not allowed.

87.0 ADDITIONS OR DELETIONS: The State reserves the right to add or delete items, agencies or locations as determined to be in the best interest of the State. Added items, agencies or locations will be related to those on contract and will not represent a significant increase or decrease in size or scope of the contract. Such additions or deletions will be documented via mutual agreement, will be at prices consistent with the original bid price margins, and will be evidenced by issuance of a written contract change notice from the Contracting officer.

88.0 CONTRACT ADMINISTRATION: The administration of this contract, including any/all changes, is the responsibility of the Contracting Officer, HQ State Equipment Fleet.

89.0 PROPRIETARY INFORMATION AND STATEMENTS OF CONFIDENTIALITY:

89.1 Except as set forth in this provision, all information in all bids will be made public under AS 36.30.530 not later than the time of issuance of a notice of intent to award.

89.2 If the offeror submits information considered by it to constitute a trade secret or proprietary data, such information may be expressly designated as such, and must be accompanied by the offeror's certification that (1) the information has consistently been maintained by its owner as a trade secret or as proprietary

information, (2) the owner of the information has taken due care to protect it from release to non-privileged persons, and (3) to the best knowledge of the offeror, the information has not lost its status as trade secret or proprietary information, whether by lack of diligent protection, release to any non-privileged person or otherwise.

- 89.3 **Absence of such certification, any claim of confidentiality will be ignored, and the bidder may not hold any reasonable expectation of confidentiality.**
- 89.4 Any information so certified will be held confidential so long as the contracting officer concurs that it constitutes a trade secret or proprietary data, and deems it not critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid.
- 89.5 By submission of a bid, the offeror consents to the contracting officer's exercise of reasonable judgment as to concurrence with any assertion of confidentiality, and waives any and all claims for release of information that the contracting officer reasonably deems not confidential notwithstanding a certified assertion of confidentiality.
- 90.0 A certified assertion of confidentiality in which the contracting officer concurs, with respect to information the contracting officer deems critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid, will cause the bid to be rejected as a non-responsive bid.

SECTION III – SPECIFICATION #217
6x4 Truck Cab & Chassis
Minimum 68,000 GVWR
June 11, 2009

GENERAL SPECIFICATION:

It is the purpose of this specification to describe a new, and of the manufacturer's latest current production model and design, diesel powered, 6x4, minimum 68,000 GVWR, minimum 108,000 GCVWR, truck cab and chassis.

The unit provided is required to meet all current all federal and state regulations such as, but not limited to, EPA emissions, FMVSS, and CFR. **When loaded, and ready for operation including; driver, full fuel load, specific attachments as listed on pages 3 and 4 of this specification, and material (gravel or similar) weighing a minimum of 21,600 pounds, spread evenly within the dump box, the unit must not exceed the manufacturer's weight rating of the vehicle at any tire or axle position. Also refer to documentation required.** Overall width exceptions will be made for the nose plow, belly blade, and snow wing.

The unit is equipped with a dump body. This dump body may be removed and replaced with a 5th wheel plate or a material spreader (sander) in the winter, therefore special controls, hydraulics and electrical wiring with quick connections may be required.

Refer to Section V - Bid Price Schedule for specific attachments and/or hydraulics required for each and every truck being requested.

Refer to the mentioned drawing for hinge pin type and location.

Unit shall include all standard equipment and accessories as advertised in the manufacturer's specification sheet of model offered, unless otherwise specified herein.

Referenced Standards:

Certain ISO, SAE, and other consensus standards may be referenced in this specification. Unless otherwise specified, the latest version of each standard is to be understood. Such standards apply to this specification whether or not they are required by statutes or administrative law.

Component Selection:

The components selected shall be new and rated for the maximum loading they would be subjected to in severe service. The torque rating of a driven component shall exceed the input torque. The component parts and structure of the unit shall be sized and designed to safely withstand the maximum load imposed, without failure or induction of deterioration. All units shall be constructed from current production components.

Necessary Components:

Contractors shall provide any components, hardware, or part necessary for proper assembly, installation, and operation even though that item(s) is not specifically described in the bid specifications. This includes all fittings, couplers, brackets, adapters, etc. Bidders shall include the cost of such components, hardware, and parts in the bid price.

APPLICATION:

Primary application is for highway and airport snow removal and sanding at average road speeds of 35 to 40 MPH. Unit will experience high impact and shock loading. In summer months, the unit will be used as a dump truck or as a 5th wheel tractor with speeds up to 65 MPH. Unit will be subject to varying terrain and weather conditions. These units are to operate between minus 30 to plus 80 degrees Fahrenheit.

Note: All weather lubricants are to be utilized to meet the above varying weather conditions.

DOCUMENTATION REQUIRED:

A basic manufacturer's product brochure describing the unit being bid is to be provided.

Specifications marked with an asterisk (*) require supporting documentation, which indicates specifically what the bidder intends to supply in regard to said items and/or how the specification would be met, in the form of a letter of clarification or by utilizing the space provided following each asterisked item. **If a manufacturer's product brochure or technical data sheet is referred to, it must be tabbed with the specification number to assist the person reviewing the bid.**

Drawings (right side and left side) of proposed spec #217 truck are to include: 8 cubic yard dump body, State Class #840-2 belly blade, State Class #854-P9RH right-hand mid-mounted patrol snow wing, fuel tank, hydraulic tank and battery box are to be provided. Blueprint quality drawings are not required.

Dimensional information provided with drawing is to include;

- (1) Cab to dump body dimension.
- (2) Overall length (front of plow hitch to back of 8 yard dump body) dimension.
- (3) Overall Width (with belly blade, and snow wing in transport position).
- (4) Overall height of completed unit dimension (top of exhaust stack may be the highest point).

Weights are to be calculated and provided on the unit with driver (200 pounds), full fuel load, State Class #842-3 **one-way snowplow** which currently weighs 3,480 pounds and has a fulcrum point of 43 inches ahead of the center of the hitch connection, State Class #840-2 oscillating belly blade, State Class #854-P9RH right-hand **mid-mounted patrol snow wing**, and an 8 cubic yard dump body with hydraulic power liftgate, in the following different configurations as;

- (1) One-Way Snowplow, Oscillating Belly Blade, and Right-Hand Mid-Mounted Snow Wing, in a lifted (up/transport) position, and empty dump body.
 - (1a) Ground weight of right front tire: _____ pounds.
 - (1b) Ground weight of left front tire: _____ pounds.
 - (1c) Ground weight of right rear drive tires: _____ pounds.
 - (1d) Ground weight of left rear drive tires: _____ pounds.
 - (1e) Total Vehicle Weight..... _____ pounds.
- (2) One-Way Snowplow, Oscillating Belly Blade, and Right-Hand Mid-Mounted Snow Wing, in a lifted (up/transport) position, and material (gravel or similar) weighing a minimum of 21,600 pounds spread evenly within the dump box.
 - (2a) Ground weight of right front tire: _____ pounds.
 - (2b) Ground weight of left front tire: _____ pounds.
 - (2c) Ground weight of right rear drive tires: _____ pounds.
 - (2d) Ground weight of left rear drive tires: _____ pounds.
 - (2e) Total Vehicle Weight..... _____ pounds.
- (3) One-Way Snowplow in float position. Oscillating Belly Blade and Right-Hand Mid-Mounted Patrol Snow Wing, in a lifted (up/transport) position, and material (gravel or similar) weighing a minimum of 21,600 pounds spread evenly within the dump box.
 - (2a) Ground weight of right front tire: _____ pounds.
 - (2b) Ground weight of left front tire: _____ pounds.
 - (2c) Ground weight of right rear drive tires: _____ pounds.
 - (2d) Ground weight of left rear drive tires: _____ pounds.
 - (2e) Total Vehicle Weight..... _____ pounds.

Weights are to be calculated and provided on the unit with driver (200 pounds), full fuel load, State Class #842-3 **one-way snowplow** which currently weighs 3,480 pounds and has a fulcrum point of 43 inches ahead of the center of the hitch connection, State Class #840-2 oscillating belly blade, State Class #854-9PRH right-hand **rear-mounted patrol snow wing**, and an 8 cubic yard dump body with hydraulic power liftgate, in the following different configurations as;

- (4) One-Way Snowplow, Oscillating Belly Blade, and Right-Hand Rear-Mounted Patrol Snow Wing, in a lifted (up/transport) position, and empty dump body.
- (4a) Ground weight of right front tire: _____ pounds.
- (4b) Ground weight of left front tire: _____ pounds.
- (4c) Ground weight of right rear drive tires: _____ pounds.
- (4d) Ground weight of left rear drive tires: _____ pounds.
- (4e) Total Vehicle Weight..... _____ pounds.
- (5) One-Way Snowplow, Oscillating Belly Blade, and Right-Hand Rear-Mounted Patrol Snow Wing, in a lifted (up/transport) position, and material (gravel or similar) weighing a minimum of 21,600 pounds spread evenly within the dump box.
- (5a) Ground weight of right front tire: _____ pounds.
- (5b) Ground weight of left front tire: _____ pounds.
- (5c) Ground weight of right rear drive tires: _____ pounds.
- (5d) Ground weight of left rear drive tires: _____ pounds.
- (5e) Total Vehicle Weight..... _____ pounds.
- (6) One-Way Snowplow in float position. Oscillating Belly Blade and Right-Hand Rear-Mounted Patrol Snow Wing, in a lifted (up/transport) position, and material (gravel or similar) weighing a minimum of 21,600 pounds spread evenly within the dump box.
- (6a) Ground weight of right front tire: _____ pounds.
- (6b) Ground weight of left front tire: _____ pounds.
- (6c) Ground weight of right rear drive tires: _____ pounds.
- (6d) Ground weight of left rear drive tires: _____ pounds.
- (6e) Total Vehicle Weight..... _____ pounds.

1.0 POWER TRAIN:

1.1 Engine:

- 1.1.1 (*) Diesel, 4-cycle, wet sleeved, water mixed with antifreeze cooled: *CATERPILLAR* or *CUMMINS* or *DETROIT DIESEL* or *MACK*. Provided all of the following minimum specifications are met.

- 1.1.2 Displacement, minimum 12.7 liters.
- 1.1.3 (*) SAE gross horsepower, minimum 425.

- 1.1.4 Governed speed, between 1950 and 2100 RPM.
- 1.1.5 SAE peak torque, between 1450 and 1550 pounds foot.
- 1.1.6 To be compatible with transmission supplied.
- 1.1.7 Fiberglass fan (*FLEXLITE* or *KYSOR* or *HORTON* or equivalent). Automatic clutch is acceptable.
- 1.1.8 Air Compressor: *CUMMINS*, *BENDIX* Tu-Flo 550 or *MERITOR WABCO*, 13.2 CFM minimum.
- 1.1.9 Engine Exhaust Brake to be *JACOBS* engine brake ("Jake Brake") or *CUMMINS* Interbrake. To include dash mounted "ON/OFF" and three (3) position switches. A *CATERPILLAR* Model 229-2618 brake is acceptable. A *PACBRAKE* Model P-63 Engine Brake for the Detroit Diesel Series 60 is acceptable. A *MACK* Power Leash is acceptable.

1.2 Air Intake System:

- 1.2.1 Air Cleaner: Single or dual, dry element type, heavy-duty.
- 1.2.2 Equipped with manual two-way "Hot/Cold" air pickup, to draw air from outside or underhood (hose disconnect or plug insert is not acceptable).
- 1.2.3 Air Filter Restriction Indicator: Dash mounted.

1.3 Exhaust System:

- 1.3.1 Regulations may include more than one (1) type of muffler if necessary.
- 1.3.2 To include exhaust pipe with heavy-duty vertical muffler and vertical tail pipe.
- 1.3.3 Exhaust extending two (2) feet above top of cab with turned out curved elbow.
- 1.3.4 Mounted running up right-hand side of cab (right-hand side is preferred, left-hand side is acceptable if required because of snow wing location), behind door.
- 1.3.5 Caged (OEM chrome or stainless steel) to protect against burns.
- 1.3.6 Shock mounted to protect against damage from vibration, if cab mounted.
- 1.3.7 Designed so vision is not impaired out of exterior rear view mirror(s).
- 1.3.8 All connections, dual clamped or *DONALDSON* "Sealclamps" or *DONALDSON* "Band" type or *TORCA*.
- 1.3.9 If flex pipe is utilized, to be stainless steel, not to exceed 18 inches in length.

1.4 Cooling System:

- 1.4.1 To include sight glass for easy viewing from ground with hood in up position (sight glass may be located on expansion tank).
 - 1.4.2 Front of radiator to be properly guarded against rocks by including any factory optional grill or grill screen cloth available. In addition, a bug screen is to be included behind the grill.
 - 1.4.3 Cooling system mounting and tank bottom configuration to be compatible and so designed as to not interfere with hydraulic pump installation.
 - 1.4.3.1 Refer to “HYDRAULICS” section later in this specification.
 - 1.4.4 Coolant to be permanent type antifreeze, affording protection to minus 60 degrees Fahrenheit. **To be DELO extended life coolant (red), or compatible.**
 - 1.4.5 To include spin-on type coolant filter, if required, with shut-off valves to prevent excessive loss of coolant when changing of filter.
 - 1.4.6 Winterfront **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):**
 - 1.4.6.1.1 Heavy-duty canvas/vinyl construction, snap-on type, with center zipper.
 - 1.4.7 Drain cock(s) (a drain plug on the engine is acceptable) to be provided for the low point(s) of cooling system for maximum drainage while unit is on level ground.
 - 1.4.8 Engine coolant hoses, including heater hoses, to be *GATES* Greenstripe or *GATES* Bluestripe or *GATES* Fleetrite.
 - 1.4.9 Clamps utilized on all pressurized coolant and heater hoses, one (1) inch inside diameter or larger are to be “Constant Torque” design, stainless steel. Some engine manufacturers may not allow changing of all clamps due to warranty. *GATES* Shrink-Band is acceptable in lieu of above.
- 1.5 Fuel System:
- 1.5.1 Fuel filter(s):
 - 1.5.1.1 To be spin-on type.
 - 1.5.1.2 To include a ¼-turn ball or check valve at the fuel filter(s) if necessary to prevent excessive fuel loss when servicing of filter(s).
 - 1.5.1.3 To be easily accessible.
 - 1.5.2 Fuel system to include heated fuel and water separator.
- 1.6 Oil Filtration:
- 1.6.1 To be spin-on type.
 - 1.6.2 To be easily accessible.
- 1.7 Starting Aids:
- 1.7.1 Automatic ether system or glow plugs or grid heater. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
 - 1.7.1.1 If automatic electronic ether injection system, *KBI* Dieselmatic or *TURNER* Quick Start or equivalent.
 - 1.7.1.1.1 To be wired through starter button.
 - 1.7.1.1.2 To include an engine safety sensor switch.
 - 1.7.1.1.3 System to be installed in engine compartment and to have maximum protection from the elements.

- 1.7.2 Engine Block Heater: Immersion type, highest wattage available, 110 volt AC (OEM if available).
- 1.7.3 Engine Oil Pan Heater: **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
 - 1.7.3.1 Immersion type, *KIM HOTSTART* Model OL41515WT/ALS68-Y or *PHILLIPS* equivalent, 110 volt AC, 150 watt.
- 1.7.4 Battery Trickle Charger: **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
 - 1.7.4.1 *SCHAUR* Model HR12C or *SCHUMACHER* Model SE-1-12S, 110 volt AC, minimum 1½ (1.5) amp or **BATTERY TENDER PLUS 1¼ (1.25) amp**, wired into the truck battery charging system. A preferred mounting location for the charger would be under the passenger seat.
- 1.7.5 Power Cords:
 - 1.7.5.1 110 volt AC power cords for engine heaters and trickle charger to be plugged into a single, waterproof, 20 amp, 110 volt junction box with four (4) receptacles. The receptacle box is to include a heavy-duty, but flexible in cold weather, 110 volt AC power cord with waterproof 20 amp *WOODHEAD* NEMA 5 plug or equivalent match, for use with 110 volt AC power source located at the right front plow hitch are for easy access by ground personnel located at the right front plow hitch area. To include matching female connector, 20 amp (to be shipped loose).

2.0 DRIVE TRAIN:

- 2.1 Configuration: 6x4.
- 2.2 Transmission (Refer to Section V – Bid Price Schedule, for automatic or manual transmission requirement):
 - 2.2.1 (*) *ALLISON WORLD TRANSMISSION* Model 4500 RDSP, **6-speed** electronic.

 - 2.2.1.1 To include automatic neutral function with wire 117 and 161.
 - 2.2.1.2 To include the oil level sensor option.
 - 2.2.1.3 To include the Allison dash mounted push button gear selector.
 - 2.2.1.4 **Allison lever shift selector (In lieu of the push button). (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule) Also refer to CONTROL CONSOLE in the Specification Supplement later in these specifications.**
 - 2.2.1.4.1 No compression brake pre-select.
 - 2.2.1.4.2 Any external lines to be steel or steel braided or rubber with inner steel braiding.
 - 2.2.1.4.3 Oil Cooler Lines: To be guarded and wrapped with *WAYTEK, INC.* Spiral Wrap Tubing. *WAYTEK, INC.*, 1-800-328-2724.

- 2.2.2 (*) Manual, *FULLER* Model RTLO-16918B 18-speed manual transmission (In lieu of the automatic transmission). **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
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2.2.2.1.1 Clutch is to be a EATON-FULLER 15½ (15.5) inch, 2-plate, with a dampened ceramic plate and 2-piece clutch brake.

2.2.2.1.2 Clutch linkage to be manual linkage only (air over hydraulic is not acceptable).

2.2.3 To be compatible with engine.

2.2.4 Oil Cooler Lines: To be guarded and wrapped with *WAYTEK, INC.* Spiral Wrap Tubing. *WAYTEK, INC.*, 1-800-328-2724.

2.3 Drive Lines:

2.3.1 1810 series heavy wall universal joints on drive lines.

2.3.2 1710 or 1760 series joints on inter-axle drive line.

2.3.3 Drive line yokes to be ½-round (if available) on the drive shafts and interaxle shafts.

2.4 Rear Axles:

2.4.1 *MERITOR* RT-46-160P. A *MERITOR* RT-46-164PWT Wide Track with pump may be required to provide adequate chain clearance per specification item 3.11.7.

2.4.2 *TRACTECH* No-SPIN, in the rear, rear differential.

2.4.3 Inter-axle differential lockout with dash mounted warning light.

2.4.4 (*) Ratio providing cruising speed of approximately 65 MPH with the maximum speed to be set at 65 MPH.

2.4.5 (*) Peak torque from engine, while plowing snow, at 35 to 40 MPH.

3.0 CHASSIS:

3.1 GVWR: 68,000 pounds minimum.

3.2 GCVWR: 108,000 pounds minimum.

3.3 (*) WB (Wheel Base) dimension.

3.4 (*) CA (Cab to Axle) dimension to be approximately 125 inches.

3.5 Frame:

3.5.1 **WORKSHOP NOTE: WHAT CAN WE DO TO STRENGTHEN OUR FRAMES?**

3.5.2 (*) Yield Strength: 110,000 PSI, minimum.

- 3.5.3 (*) RBM: 2,387,000 inch pounds, minimum. NOTE: These are minimums. Bid with the application of these trucks in mind.
-
- 3.5.4 To be completely primed painted to inhibit rust.
- 3.5.5 Also, since unit is to be equipped with a plow hitch and crankshaft mounted hydraulic pump, refer to "PLOW HITCH" and "HYDRAULICS" later in this specification for information about frame extension. Frame extension to be OEM.
- 3.5.6 (*) Overhang/After Frame Dimension (center of rear tandem to end of frame) to be approximately 66 inches.
-
- 3.5.6.1 This will place the center of the dump body hinge at 62 ½ (62.5) inches rear of the center of tandem and an approximate distance of 14 ½ (14.5) inches rear of the rear drive tires.
- 3.5.7 Frame is to include an outboard rack mount to accept a 5th wheel plate as described in the Class #254 tractor specification.
- 3.6 Front Axle:
- 3.6.1 (*) DANA SPICER Model EFA or DANA SPICER Model I-220S or MACK Model FAW22 or MACK FXL23, minimum 22,000 pound capacity.
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- 3.6.2 Oil seals in hubs.
- 3.6.3 (*) BA (front bumper to front axle) Dimension: (This dimension is based on standard OEM bumper location and does not include any optional front frame extension length).
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- 3.7 Front Suspension:
- 3.7.1 (*) Capacity: Minimum 22,000 pounds total.
-
- 3.7.2 Shock absorbers, heavy-duty.
- 3.8 Rear Suspension:
- 3.8.1 (*) CHALMERS 800 Series, HENDRICKSON HN-462 or VOLVO T-Ride, 46,000 pound capacity. To include heavy-duty shock absorbers.
-
- 3.8.1.1 HENDRICKSON RT-463 (**OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule**).
- 3.8.2 54 inch axle spacing, minimum.
- 3.8.3 To include transverse torque arms, if 60 inch axle spacing and applicable.
- 3.9 Steering:
- 3.9.1 (*) To be SHEPPARD M110 or TRW TAS 85 Series, dual assist, rated at front axle's GVWR, minimum.

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- 3.9.2 (*) Turning Diameter (both left and right): Curb to curb, (outside front tire) to be maximum 80 feet.
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3.10 Brakes:

- 3.10.1 ABS, as required.
- 3.10.2 Full air with low pressure audible and visual warning device located in cab.
- 3.10.3 Front: *DANA SPICER* Model ES-165-6 *MERITOR* Model Cam-Master Q Plus 16.5x6, with outboard drums.
- 3.10.4 Rear: *MERITOR* Model Cam-Master Q Plus, 16.5x7 or *DANA SPICER* Model ES-165-7 16.5x7, with outboard drums.
- 3.10.4.1 Rear Brakes are to accept *SPICER* p/n 4515Q brake shoes.
- 3.10.5 Slack Adjusters:
- 3.10.5.1 To be *MERITOR/ROCKWELL* automatic with handed (if required to prevent interference) pull pawl design assembly.
- 3.10.5.2 Sealed against dirt and corrosive materials.
- 3.10.5.3 Lube fitting for positive lubrication of all moving parts.
- 3.10.6 Capability for in-field service.
- 3.10.7 Splash/dust shields, heavy-duty steel, on all axles.
- 3.10.8 Brake Pedal: **If floor mounted design**, the hinge pin and pedal base/mounting plate located above floor grade shall be stainless steel. The mounting plate shall be sealed to the floor as to not allow liquid to seep through to the treadle valve assembly below floor.
- 3.10.8.1 (*) An anodized aluminum base/mounting plate with a stainless steel plate is acceptable, but will require a 12-year replacement warranty against corrosion failure.

3.10.8.2 VENDORS: Possible to get a firewall mounted brake pedal???

- 3.10.9 Emergency Brakes: *ANCHORLOCK* Life-Seal or *MGM* TR-TS.
- 3.10.10 Trailer Brakes:
- 3.10.10.1 Connections, break-away type, located on rear of unit, next to pintle hitch.
- 3.10.10.2 Gladhand dust seals.
- 3.10.10.3 Cab mounted hand control valve.
- 3.10.11 Air System:
- 3.10.11.1 Chassis' hoses to be manufacturer's standard.
- 3.10.11.2 All added air hoses to be SAE 100R5 type "T" Arctic grade (-50 to +240 degrees Fahrenheit).
- 3.10.11.3 Air Dryer: Air system to include a *BENDIX* AD-IP or *MIDLAND* DA33100 or *ROCKWELL-WABCO* System Saver 1200.

3.10.11.3.1 *CLEAR DRAIN* in lieu of the above air dryer. (**OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule**)

3.10.11.4 Air pressure relief valve to be located under hood.

3.10.11.5 Air Reservoir Tanks:

3.10.11.5.1 Primary tank to be heavy-duty steel construction, minimum 1200 cubic inch.

3.10.11.5.2 Secondary tank to be heavy-duty steel construction, minimum 1200 cubic inch.

3.10.11.5.3 To be installed in protected locations.

3.10.11.5.4 Primary air tank, fitted with a quick disconnect air supply fitting, *CHICAGO PNEUMATIC* p/n CA-046302 with ¼-turn ball valve mounted on the outside of the left-hand side frame rail.

3.10.11.5.5 All air tanks to be equipped with manual drain petcocks. Petcock(s) or drain actuators to be accessible from side of vehicle, easily accessible from side of unit by ground personnel (a lanyard type cord may be necessary).

3.11 Wheels and Tires:

3.11.1 All wheels and tires are to be rated for the axles.

3.11.2 Front Wheels: **Hub** piloted type, steel disc.

3.11.3 Front Tires:

3.11.3.1 (*) *BRIDGESTONE* M844F Product Code 291684 or *GOODYEAR* G286SS Product Code 759-452-541 or *MICHELIN* XZY (WB) Product Code 66464, 425/65R22.5, LRL (18PR) minimum, steel belted radial tubeless.

3.11.4 Rear Wheels: **Hub** piloted type, steel disc.

3.11.5 Rear Tires:

3.11.5.1 (*) *BRIDGESTONE* M711 Product Code 283681 or *GOODYEAR* G244 Product Code 138-803-301 or *MICHELIN* XDS Product Code 53709, 11R22.5, LRH (16PR) minimum, steel belted radial tubeless.

3.11.6 Front and rear tires, including spare tires, are to be siped (the *MICHELIN* XDS tires are not to be siped). Siping is a process that cuts slits across tire treads without removing rubber. Slits should be ¼ (0.25) inch apart and a minimum ¼ (0.25) inch in depth. This process to be accomplished using the *SAF-TEE SIPER* by *SAF-TEE SIPING & GROOVING, INC.*, 3647 E. Sunrise Dr., Minnetonka, MN 55345, Phone (612)935-4540, or equivalent siping process.

3.11.7 Duals to be spaced for use with triple rail chains and shall provide a minimum two (2) inch clearance between the inner sidewall of the dual tire and spring leaves, clamps, hanger or any other obstruction which might interfere with normal operation of tire chains.

3.11.8 *ACCURIDE* Wheel-Guards are to be supplied between the front wheels and the hubs, between the rear wheels and the hubs, and between the rear dual wheels.

3.12 A spare front and rear wheel, with designated tires, mounted. To be shipped loose.

- 3.13 Mud Flaps: Heavy-duty rubber, installed at rear of front fenders, minimum 12 inches, maximum 14 inches, above the ground. Flaps are to be as wide as tire and extend out to edge of tire, as a minimum. Steel rods, used for anti-sail, are not to be used.
- 3.14 Front Wheel Wells:
 - 3.14.1 To provide adequate protection to engine compartment, including radiator, engine components, etc., from rocks, mud, and water spray.
 - 3.14.2 Front wheel wells are to be kept clear of components, such as transmission coolers, loose wiring, etc.

4.0 ELECTRICAL SYSTEM:

- 4.1 12-volt negative ground.
- 4.2 Alternator: 12-volt, 140 amp, *LEECE NEVILLE* Series 8LHA2070VB Part No. 110-555HD or Series BLD-BLP Part No. BLP2303.
- 4.3 Batteries:
 - 4.3.1 Four (4) each, maintenance free 12-volt BCI group 31 batteries.
 - 4.3.2 Each having a 160 minute reserve and minimum 625 CCA at zero degrees Fahrenheit.
 - 4.3.3 Battery box is to be provided to protect batteries from build-up of snow, ice mud, etc.
 - 4.3.3.1 Battery box to be easily accessible.
 - 4.3.3.2 Battery box location is to be located on outside left frame rail, just behind the cab (if possible), bolted to frame rail, not to interfere with dump box, or belly blade, or if behind cab entry steps, still provide adequate space to prevent any snow or ice build-up under the top step.
- 4.4 Master Switch(s):
 - 4.4.1 High-ampere switch or switches to cut off power source from battery to the ground (ground side) and remainder of electrical system, *COLE HERSEE* #284-02 or *POLLAK* #51-315.
 - 4.4.2 To be mounted on the cab floor, between the rear side of the driver's seat and the door sill.
- 4.5 All standard electrical and lighting equipment to meet ICC Safety Standards.
 - 4.5.1 Refer to "DUMP BODY" section later in this specification for information on lighting requirements.
- 4.6 All electrical control switches to be direct current rated.
- 4.7 Headlights: To be halogen.
- 4.8 Back-Up Alarm: Electronic, self-adjusting sound level, *ACORN PRODUCTS* Model 1D-112AA or *PRECO* Preco-Matic Model 1040 or *STAR* Model Starmatic 63-000 or *TARGET TECH* Model 210504 or *VELVAC* Model 697066 or *WARN* Model Reactor 2100504, located on the rear of the chassis, as per manufacturer's instructions.
- 4.9 Two (2) post terminal block power source, located on the dash.
- 4.10 To include a road speed signal post in the cab (to allow connection for sand spreader controller).
- 4.11 Wiring:
 - 4.11.1 Unit is to include any and all optional RF (Radio Frequency) shielded wiring harnesses available, including the engine and transmission.
 - 4.11.2 Accessory wiring to include rated breaker switches incorporated into the center control console.

- 4.11.3 Accessory wiring to be in dedicated looms entering cab, not mixed looms. (Example: Strobe light wiring to be in one (1) separate loom).
- 4.11.4 All wiring to be color coded, and located for maximum protection from road splash, stone abrasion, grease, oil, fuel, and heat from engine and components.
- 4.11.5 Routing through structural members to be protected by grommets, and to be secured by clips at intervals to prevent rubbing or chafing due to movement.
- 4.11.6 All applicable junction boxes, light housings and trailer outlet connectors to be constructed of corrosion proof material.
- 4.11.7 All auxiliary wiring should be continuous (any splices or connectors are to be weather proof) from the cab junction box to the bulkhead connector plate, from there to the body junction box, then from the body junction box to all rear of cab stop, turn, tail, back-up, and strobe lights, and accessories.
 - 4.11.7.1 The harness from the cab junction box shall consist of a seven (7) conductor, *BEE WIRE & CABLE, INC.* or equivalent, SAE & ATA oil and water resistant, good to minus 55 degrees Fahrenheit, trailer wire (as described below), color coded, with six (6) wires of 12 gauge, and one (1) wire of 10 gauge for ground.
- 4.12 Rear Chassis Taillights:
 - 4.12.1 The chassis taillights are to be LED and be mounted to the hinge point of the body between the mounting pads for the long members of the dump body.
- 4.13 Provision for mounting rear license plate shall be provided with appropriate light(s) to illuminate the license plate area.
- 4.14 Trailer Wiring and Locations:
 - 4.14.1 Electrical wiring to be *BEE WIRE & CABLE, INC.* or equivalent, SAE & ATA oil and water resistant, good to minus 55 degrees Fahrenheit.
 - 4.14.2 Wires to be a continuous run from source block to plug, *POLLACK* #11-724 Split Pin (to include *POLLACK* #11-761 Socket Boot) or *PHILLIPS* equivalent.
 - 4.14.3 To be located within 18 inches streetside of pintle hitch, same level as pintle (but not on butt plate), to include seven (7) wires. Wired to Federal DOT standards:
 - 4.14.3.1 A *POLLACK* or *PHILLIPS* socket with boot described above is to be used.
 - 4.14.3.2 Wire position #1, white, 10-gauge, for ground.
 - 4.14.3.3 Wire position #2, black, 12-gauge for clearance, side marker, and identification lamps.
 - 4.14.3.4 Wire position #3, yellow, 12-gauge, for left turn.
 - 4.14.3.5 Wire position #4, red, 12-gauge, for stop lights.
 - 4.14.3.6 Wire position #5, green, 12-gauge, for right turn.
 - 4.14.3.7 Wire position #6, brown, 12-gauge, for tail and license plate.
 - 4.14.3.8 Wire position #7, blue, 12-gauge, for ABS power.
 - 4.14.3.9 This plug location must be clearly marked "ABS" with a permanent engraved or welded label.
 - 4.14.4 The lower left rear of cab area location, to include seven (7) wires (for material spreader) set up as follows:
 - 4.14.4.1 A *POLLACK* or *PHILLIPS* socket with boot described above is to be used.

- 4.14.4.2 Wire position #1, white, 10-gauge, for ground.
- 4.14.4.3 Wire position #2, black, 12-gauge for clearance, side marker, and identification lamps.
- 4.14.4.4 Wire position #3, yellow, 12-gauge, for left turn and stop.
- 4.14.4.5 Wire position #4, red, 12-gauge, for auxiliary circuit.
- 4.14.4.6 Wire position #5, green, 12-gauge, for right turn and stop.
- 4.14.4.7 Wire position #6, brown, 12-gauge, for tail and license plate.
- 4.14.4.8 Wire position #7, blue, 12-gauge, for sander work lights.
- 4.14.4.9 This plug location must be clearly marked "SANDER" or "MATERIAL SPREADER" with a permanent engraved or welded label.

- 4.15 All lamp connections and all junction box post connections shall be treated with corrosion inhibitor dielectric grease.

5.0 CAB:

- 5.1 Conventional (not cab-over) design with sloping hood to provide minimum bumper to road surface non-viewing area for maximum forward visibility.
- 5.2 To provide maximum room inside the cab for all sizes of operators and components.
- 5.3 The layout of all controls, gauges and instrumentation is to be ergonomically designed.
- 5.4 To provide maximum room inside the engine compartment for ease of maintenance on the engine.
- 5.5 To be conventional severe service cab of welded or riveted type steel and/or aluminum construction (fiberglass construction of roof, hood and fenders is acceptable), and to include the following:
 - 5.5.1 (*) BBC (Bumper to Back of Cab) dimension. This measurement is not to include any of the frame extension length.

 - 5.5.2 (*) Minimum shoulder width of 66 inches (measurement is from inside of door panel to opposite inside door panel.)

 - 5.5.3 Maximum OEM insulation throughout to protect against cold and noise. (Roof, back wall, floor, and firewall, to be covered. Doors are to be OEM paneled).
- 5.6 Air ride cab is acceptable (non air ride cab is preferred).
- 5.7 Tilt hood capable of staying open when tilted 45 or more degrees.
 - 5.7.1 Must clear plow hitch without having to tilt plow hitch.
 - 5.7.2 Hold tie downs to be flex rubber type only.
- 5.8 Free standing grill is required for the "PLOW HITCH" described later in this bid package.
- 5.9 For ease of engine maintenance, if equipped with a cab interior mounted engine cover (dog house), cover must be easily removed from the cab without having to remove; dash, seat(s), and/or control console pedestal described in the "SPECIFICATION SUPPLEMENT" later in this bid package. The necessary removal of International's shift pad/lever mount is acceptable.
- 5.10 Dual sun visors.

- 5.11 Exterior front upper cab mounted fiberglass sunvisor. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule).**
- 5.12 Glass:
- 5.12.1 Safety glass throughout.
- 5.12.2 Passenger door to include a “Visibility Window” or “Look Down Mirror” to allow viewing of the area along the right-hand side of vehicle.
- 5.12.3 Front glass to be split window design (Pop-In/Pop-Out or bonded, are acceptable).
- 5.12.4 To include rear window.
- 5.13 Windshield Wipers:
- 5.13.1 To be *EVERBLADES* with a steel frame, heated and include a separate dash mounted lighted “ON” switch.
- 5.13.2 Shall include heavy-duty, dual, electric powered, variable speed, and wipers with intermittent swipe feature.
- 5.13.3 To include windshield washer system (largest fluid capacity available).
- 5.14 Visibility:
- 5.14.1 (*) In addition to the “Visibility Window” or “Look Down Mirror”, the special heated wiper blades, the defroster fans, a high air flow heater system and an auxiliary heater, other systems may be required to keep the windows clear of snow, ice, fog, and mud build-up. Describe your system. Heated windshields may be priced as an optional item, as per the last paragraph in the Bid Price Schedule.
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- 5.15 Arctic package fresh air type hot water heater and defroster, to be OEM with minimum 30,000 BTU.
- 5.15.1 Auxiliary heater, *HUPP* or *RED DOT*, minimum 16,000 BTU. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
- 5.15.2 Auxiliary heater, *HUPP* or *RED DOT*, minimum 30,000 BTU. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
- 5.15.3 Note: If an auxiliary heater is requested, it will be either a 16,000 or 30,000 BTU heater, not both.
- 5.15.4 If an auxiliary heater is requested:
- 5.15.4.1 Plumbed in series with standard equipment.
- 5.15.4.2 To include easily accessed in-line shut off valves to prevent excessive loss of coolant when working on system.
- 5.15.4.3 Located back wall area of cab, with air flow directed towards driver’s foot pedals and air flow not obstructed by seat or control tower(s).
- 5.15.4.4 Controls, easily accessed by driver, to include 2-speed fan and temperature setting.
- 5.15.5 Defroster Fans: To include two (2) each total (one each left side and one each right side), caged, two-speed defroster fans, located overhead. Switch(s) to located for easy access by driver.
- 5.16 Air Conditioning **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):**
- 5.16.1 To be OEM, minimum 17,000 BTU.

- 5.16.2 (*) To be integrated into the OEM cab heater system so as to work in conjunction with the windshield defrosting system.
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- 5.17 Rear View Mirrors (Exterior):
- 5.17.1 Motorized (both left-side and right-side):
- 5.17.1.1 *LANG MEKRA* or *LUCERIX* or *MOTO MIRROR* or *RETRAC* or similar, with a minimum size of 90 square inches (Includes main and convex).
- 5.17.1.2 Mirror and brackets are to be stainless steel or anodized aluminum or powder coated steel (poly mirror housing is acceptable).
- 5.17.1.3 Main mirror to be motorized for minimum left/right adjustment.
- 5.17.1.4 A heated convex mirror (built-in or separate), approximately eight (8) inches in diameter (semi-rectangular is acceptable) is to be included directly below the main mirror (mounting in the main mirror's housing or directly below the main mirror's housing).
- 5.17.2 Optional Mirror Setup (In lieu of both mirrors being motorized). **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
- 5.17.2.1 If requested in the Bid Price Schedule, the left/driver's side mirror to be *WEST COAST* TYPE: Heated, stainless steel or poly, 6x16 inch minimum. (Right side is motorized as described above).
- 5.17.2.2 To include an eight (8) inch circular convex mirror, *SIGNAL STAT* p/n 7078 (or OEM equivalent), heated, mounted below the West Coast type mirror. A built-in, such as the above described mirrors is acceptable in lieu of the eight (8) inch circular convex mirror.
- 5.17.2.3 The right/passenger mirror would remain the motorized mirror as described above.
- 5.17.3 Mirror heat (both main and convex) to be thermostatically controlled or include a separate, easily accessed, switch with an "ON" indicator light.
- 5.17.4 Controls for mirror movement to be easily accessed.
- 5.18 Dome Light: OEM, interior roof mounted.
- 5.19 Steering Wheel: To include tilt and telescopic feature.
- 5.20 Seats to be cloth or vinyl with cloth insert in a darker color.
- 5.20.1 Driver's seat, high back, premium air ride, 6-way with lumbar adjust, air adjust (up/down), and fore/aft.
- 5.20.2 Companion/passenger seat, mid height or high back.
- 5.21 Storage Pouch: For shipping documents, etc., to be located on driver's door.
- 5.22 Grab handles, dual (for three-point entry), to assist entry. Located on each side of the cab.
- 5.23 Entry Steps:
- 5.23.1 Left and right side to include two (2) entry steps.
- 5.23.2 The height and location to be proportioned for easy access to cab, yet allowing for adequate clearance for belly blade operations.
- 5.23.3 All steps are to be full width of door area, minimum.

- 5.23.4 Steps are to be frame mounted and constructed of expanded galvanized, or aluminum, 4.6 inches in depth, minimum.
- 5.24 Fuel Tank and Dump Body Access:
 - 5.24.1 A step or platform providing access for filling of fuel tank and viewing of contents in the dump body is to be provided on the left side, approximately frame height, and having a length from within a minimum of six (6) inches behind the cab to within a minimum of eight (8) inches of the dump body.
 - 5.24.2 The step or platform is to be made of expanded galvanized metal and have a depth of a minimum 12 inches, frame mounted, adequately designed to handle a 300 pound person without deflection.
- 5.25 Door locks.
- 5.26 Rustproof treated prior to assembly of cab interior.
- 5.27 Air Horn: If exterior mounted, to be located on top of cab and include snow shield.

6.0 INSTRUMENTS/GAUGES AND ACCESSORIES:

- 6.1 In addition to what has been described in the CAB section of this specification, the unit is to include a hinged or front serviceable type panel with a full complement of dash mounted instrumentation/gauges and accessories including, as a minimum:
 - 6.1.1 Any and all gauges that show pressures, temperatures, etc., are to be in U.S.A measurements such as PSI, Fahrenheit, etc.
 - 6.1.2 Hour Meter: LCD with no moving parts, running engine activated.
 - 6.1.3 Warning lights for low engine oil pressure and high engine coolant temperature.
 - 6.1.4 Voltmeter.
 - 6.1.5 Engine oil pressure gauge.
 - 6.1.6 Engine coolant temperature gauge.
 - 6.1.7 Air pressure gauge and low pressure audible alarm.
 - 6.1.8 Fuel gauge.
 - 6.1.9 Tachometer.
 - 6.1.10 Speedometer and odometer.
 - 6.1.11 Dash mounted speed control, electronic cruise control type (to allow for engine warm-up to minimum 1400 RPM and PTO requirements).
 - 6.1.12 OEM AM/FM radio with CD (compact disc) player.
 - 6.1.13 Outside Air Temperature Indicator: Electronic (12-volt) gauge to be easily viewed by driver.
 - 6.1.13.1 ROADWATCH system, gauge showing air temperature and road temperature, to be dash mounted in a display mounting pedestal, in lieu of the above outside air indicator. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule).**
 - 6.1.14 Pyrometer gauge. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule).**
 - 6.1.15 Manifold pressure gauge. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule).**
 - 6.1.16 All other standard instruments and equipment normally provided.
- 6.2 All switches, gauges and controls to be properly identified.

6.2.1 *DYMO* type tape labels are not acceptable, and stick-on type labels are not acceptable unless they are listed in the parts book with part numbers. Otherwise, the labels are to be riveted or similar to maintain position.

6.3 All dials, gauges, switches, controls, and IDs to be properly lighted for day or night operation (a flexible cable night light is not acceptable).

7.0 FUEL TANK (Standard – Behind the Cab):

7.1 (*) Heavy-duty with a minimum useable capacity of **120** usable gallons, providing adequate fuel for a ten (10) hour shift, and shall conform to all Federal standards.

7.2 Aluminum. Or steel, pickled and oiled, construction, minimum 10 gauge shell with minimum seven (7) gauge ends.

7.3 Baffles: As required.

7.4 Location and Mounting:

7.4.1 To be located behind the cab.

7.4.2 Fill cap to be located on street side (left) top of tank.

7.4.3 Height shall not extend above bottom of rear truck cab window.

7.4.4 Width shall not extend past cab's width.

7.4.5 Location shall not pose major access problems for maintenance on any components located below the tank.

7.4.6 Shall allow for adequate bracing of vertical exhaust system.

7.4.7 Mounting to include a cushion system to prevent damage to tank from the trucks application.

7.5 Drain, ½ (0.5) inch, minimum.

7.6 Steps and grab handles (three point) on the truck cab and dump body are required for ease of filling tank.

7.7 A shut-off valve (1/4-turn ball) is required at fuel line exit for servicing of fuel system, or removal of tank, without having to drain the tank.

7.8 Fuel lines added by the body builder to be *PARKER/STRATOFLEX* 213 Single Wire or equivalent (with minimum temperatures from minus 55 to plus 300 degrees Fahrenheit). To be FMVSS approved.

7.9 Paint (if steel construction):

7.9.1 Color to be BLACK.

7.9.2 To be cleaned of all contamination and millscale by media blasting.

7.9.3 To be then primed and painted, minimum of 3.5 mils, with urethane product to manufacturer's recommendations or powder coated, black in color.

8.0 FUEL TANK, OPTIONAL (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

8.1 In lieu of the behind the cab mounted tank.

8.2 Saddle tank location, for when a belly blade will not be used.

8.3 Aluminum construction, minimum total usable capacity of **120** useable gallons.

8.4 Drain, ½ (0.5) inch, minimum.

9.0 BUTT PLATE AND PINTLE HITCH:

- 9.1 To be load rated for tow capacity of 40,000 pounds minimum.
- 9.2 Butt plate, face of, to be flush with end of frame, which will give a dimension of approximately 14 ½ (14.5) inches rear of the rear drive tires. The butt plate shall be similar in size and design as the State's existing year 2000 trucks.
- 9.3 Pintle Hitch:
 - 9.3.1 *HOLLAND* Model PH-200 or *PREMIER* Model 270A, air cushioned hitch.
 - 9.3.2 Mounting:
 - 9.3.2.1 Mounted to the butt plate.
 - 9.3.2.2 Mounting Height: To be approximately 31 inches from bottom of saddle to level ground, not loaded.
 - 9.3.3 Air cushion to be activated by emergency brake release.
 - 9.3.4 After bid award, there most likely be changes as to the location of dump body hinge and the butt plate, and on how a rear wing post would be mounted. We will work with the successful bidder (and body builder) at that time to make these changes. Change orders may be required if agreed upon by the bidder and the State.
- 9.4 Include area for 7-pin electrical connections.
- 9.5 To include safety chain "D" rings.

10.0 TOW HOOKS:

- 10.1 Two (2) each, suitably installed on front of truck frame or frame area of plow hitch, each having sufficient capacity to tow loaded vehicle.

11.0 MISCELLANEOUS:

- 11.1 Lubricants: Unit's components will include lubricants matched for the weather temperatures for the area being delivered. For example, low temp grease should be installed in the slack adjusters.
- 11.2 All electric wiring, hoses, lines, cables, etc., shall be professionally routed and supported to reduce damage and insure ease of replacement.
 - 11.2.1 Hydraulic Lines: To be guarded and wrapped with *WAYTEK, INC.* Spiral Wrap Tubing. *WAYTEK, INC.*, 1-800-328-2724.
- 11.3 Winterization: Entire unit shall be winterized to provide satisfactory performance in temperatures between minus 30 to plus 80 degrees Fahrenheit.
- 11.4 **Specifications on – Paint, Training, and Inspections, can be found in the Specification Supplement section of this bid package.**

SPECIFICATION SUPPLEMENT
Plow Trucks & Tractor Trucks

The purpose of these specifications is to describe items that may be called for when purchase orders are put together. These items where called for are to be furnished in addition to items contained in the specifications for the indicated vehicle(s)/equipment.

Refer to Section V – Bid Price Schedule for specific attachments and/or hydraulics required for each and every truck being requested.

It is possible that the following optional item may be ordered separately on a purchase order: 17 Cubic Yard Dump Body (Spec Item 105.0).

Component Commonality:

For purposes of maintaining commonality, each specification class shall have identical components and within the classes when practicable, unless the specification or purchase order requires the optional brand or model. All components shall be new and of the manufacturer's latest current production model and design.

DOCUMENTATION REQUIRED:

A basic manufacturer's product brochure describing the units being bid is to be provided.

Specifications marked with an asterisk (*) require supporting documentation, which indicates specifically what the bidder intends to supply in regard to said items and/or how the specification would be met, in the form of a letter of clarification or by utilizing the space provided following each asterisked item. **If a manufacturer's product brochure or technical data sheet is referred to, it must be tabbed with the specification number to assist the person reviewing the bid.**

101.0 PLOW HITCH (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 101.1 Tailored heavy-duty plow hitch assemblies only, for mounting to existing State plows. **Drawing #5C** and **Drawing #6A1** may be used for reference. Unit will experience high impact and shock loading.
- 101.2 Ensure geometry of hitch lift arms and rams prevent ram from bottoming or over extending.
 - 101.2.1 The standard lift arm is 18 inches in length.
 - 101.2.2 Optional manually extended lift arm capable of extending from 18 inches to 24 inches. **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**
- 101.3 Cylinders:
 - 101.3.1 Rods to be nitrided.
 - 101.3.2 To be double acting cylinder.
 - 101.3.3 Barrel to be four (4) inch minimum inside diameter and provide a ten (10) inch stroke.
- 101.4 Mounting:
 - 101.4.1 Hitch vertical frame to be located as close to radiator as possible.
 - 101.4.2 To include all necessary components.
 - 101.4.3 To include a free standing design grill.
 - 101.4.4 Separate frame extension bolted to main frame is not acceptable.
- 101.5 Welding: All welding to meet American Welding Society specifications, Structural Welding Code, D.1.1 (current editions).
- 101.6 Special Frame Reinforcement:

101.6.1 Due to the possible necessity of cutting away the top channel, and in some cases the top part of the frame, for radiator and/or tilt hood clearance, certain reinforcement is required to strengthen and support the front part of the frame to accommodate a front mounted snowplow hitch assembly. The following or similar reinforcement, needed to support the additional, required vertical and horizontal thrust of the plow hitch to the frame, is to be installed on the main frame provided by manufacturer, bolted to frame and cutout only around front spring brackets. Steering gear box or any other components bolted to frame in area of reinforcement shall be bolted through main frame (and standard reinforcement if provided) and special front plow reinforcement indicated as follows:

101.6.2 Special frame reinforcement of 5/8 (0.675) inch T-1 steel, attached to main frame with 3/4 (0.75) inch grade-8 flanged nuts and bolts (except where larger bolts may be used to attach steering box, etc.).

101.6.2.1 To extend back from grill along frame 36 inches and forward of grill 2½ (2.5) inches, being cutout only around spring brackets.

101.6.2.2 To be frame height behind spring bracket cutout, but extend six (6) inches below frame ahead of cutout.

101.6.2.3 Where frame or top channel are cutout for radiator or tilt hood installation, top or reinforcement is to conform to contours of resulting cutaway.

101.6.2.4 See example Drawing #6B, at end of this specification.

101.6.2.5 If special frame reinforcement is required, manufacturer shall submit, with bid package, a drawing of the proposed frame reinforcement offered.

101.6.3 Paint: To be cleaned of all contamination and millscale by media blasting, and then primed and painted, minimum of 3½ (3.5) mils, with polyurethane product to manufacturer's recommendations or powder coated, black in color.

101.7 Snowplow Lighting Package:

101.7.1 Consisting of; brackets, sealed beam halogen high/low beam lamps, double face turn signal lights, and wiring for quick connect and disconnect (for removal during off season). Refer to Drawing #5C.

101.7.2 To also include "Moose Lights". Mounted on same bracket as the sealed beam lights described above. To be *LIGHT-FORCE* Model RMDL-240.

101.7.2.1 These lights are to be switch relay connected into the switch of the high beam lights.

101.7.2.2 There is also to be a separate switch between the relay and the light. Switch is to be dash or console mounted.

101.7.3 To include a control console mounted switch with magnetic relay to change from plow lights to truck lights and back.

102.0 DUMP BODY (8 YARD) AR400 (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

102.1 (*) It is the intent and purpose of these specifications to describe an AR400 steel constructed, heavy-duty, contractor type, dump body, with a box length of 13 ½ (13.5) feet and a outside box width of 96 to 98 inches. The box is to have a minimum eight (8) cubic yard struck capacity (water level sides), with eight (8) inch raised ends and side board pockets.

102.2 Acceptable manufacturer's are (providing all specifications are met); *BOB'S SERVICES* or *COLUMBIA BODY & EQUIPMENT* or *CRYSTEEL MFG*, *DEL EQUIPMENT* or *FONTAINE BODY & HOIST*, *THE*

HEIL CO or HENDERSON MFG or LYNNWOOD EQUIPMENT or MIDWEST or TRUCKWELD or WILLIAMSON.

- 102.3 Floor, sides and bulkhead to be ¼ (0.25) inch thick AR400 plate steel.
 - 102.3.1 Floor is to be seamless.
 - 102.3.2 Sides are to be seamless.
- 102.4 Tailgate to be 3/16 (0.1875 inch thick AR400 plate steel.
- 102.5 Dump body hinges are to be centered 7 ½ (7.5) inches from the end of the dump body and centered 62 ½ (62.5) inches from the chassis trunnion. Clarification Note: The distance to the end of the dump body does not include the tailgate.
- 102.6 Dump body hinge pins, minimum two (2) inches in diameter, removable, 416 stainless steel, with grease zerks.
 - 102.6.1 Drawings on pins available upon request. The drawings show the hinge pin diameter as 2.25 inches, which is incorrect. The correct diameter is 2.0 inches.
- 102.7 Tailgate Release:
 - 102.7.1 To be *ANCHORLOCK* Model 24LS or *MGM* Model Over-Center Lock or *VELVAC* Model 101003, electric solenoid operated two-way tailgate release air cylinder.
 - 102.7.2 Permits driver to unlock tailgate without leaving cab (console mounted switch).
 - 102.7.3 Tailgate release mechanism must hold and release at a 45 degree raised position, fully loaded (sand or gravel).
- 102.8 Cab guard, heavy-duty, OSHA approved, minimum 36 inch depth, full width (offset or cut away if necessary for use with vertical exhaust tailpipe). Constructed of minimum 3/16 (0.1875) inch high tensile (50,000 PSI) material.
- 102.9 Lighting and Wiring:
 - 102.9.1 Strobe Lighting:
 - 102.9.1.1 To be equipped with the *WHELEN* SuperStrobe system as set forth in referenced *WHELEN* drawing with the following noted changes.
 - 102.9.1.2 The *WHELEN* Model USP64LX (change from drawing) Strobe Power Supply is to be installed inside the chassis cab a minimum of two (2) inches above cab floor. A preferred location would be by the passenger seat area with easy access for maintenance.
 - 102.9.1.3 To include separately switched with “HIGH/OFF/LOW” console mounted switch.
 - 102.9.1.4 Two (2) each *WHELEN* Model L31H LED strobe lights (change from drawing). Amber lens light to be mounted on forward left corner of cab guard and blue lens light to be mounted on forward right corner of cab guard.
 - 102.9.1.5 Two (2) each *WHELEN* Model S Head Assemblies to be mounted approximately seven (7) feet above ground level in rear corner posts. Left unit to be amber, right unit to be blue.
 - 102.9.2 All-in-one stop, turn, and taillights, and back-up lights shall be shock mounted *TRUCK-LITE* Model Super 44 LED. To be mounted in the rear corner posts below the strobe lights (described later in this specification) with the back-up lamp being mounted below the combination lamp.

- 102.9.3 To include all necessary marker and clearance lights, recessed and/or guarded to prevent damage. To be LED.
- 102.9.4 Wiring:
 - 102.9.4.1 To include *BETTS* vapor proof system or *TRUCK-LITE* super system, installed to meet all Federal and State DOT regulations.
 - 102.9.4.1.1 This closed system shall be designed to protect against abrasion, salt, capillary action, and physical damage using sealed junction boxes, compression fittings and standard production *BETTS* or *TRUCK-LITE* sealed wiring harnesses.
 - 102.9.4.2 All wire ends shall be crimped and soldered.
 - 102.9.4.3 Insulation-piercing connectors are not acceptable.
 - 102.9.4.4 All harnesses shall be supported by rubber coated stainless steel band clamps placed approximately every 24 inches.
 - 102.9.4.5 All lamp connections and all junction box post connections shall be treated with corrosion inhibitor dielectric grease.
- 102.10 Mudflaps, anti-sail, to be plain black rubber or heavy-duty neoprene, suspended from dump box to approximately 12 inches above ground. Minimum 24 inches wide and installed forward and behind drive wheels.
- 102.11 Body mounted safety stanchions, to hold dump body in approximately a 45 degree angle, permanently installed on both sides of body, built to rest in a heavy-duty mounted socket, without a second person needed to guide into place.
 - 102.11.1 To be secured tightly to body with rubber tie downs when not in use.
- 102.12 Snow tire chain clearance must be maintained per cab and chassis specification.
- 102.13 All side bracing, tailgate and running boards to be sloped. To include two (2) each 12 inch long expanded metal steps on running boards at front of box and over trunnion.
- 102.14 Weight distribution of the chassis:
 - 102.14.1 Dumping geometry on body in relation to the hinge, overhang and angle of dump must be cleared with the State Equipment Fleet Spec Writer, before manufacture.
- 102.15 Dump Hoist:
 - 102.15.1 Mounting to the frame is to include an easy bolt-on design to allow removal of the dump hoist assembly to install a sander body.
 - 102.15.2 (*) Telescopic front head mount (trunnion mounted is acceptable), minimum six (6) inch, *COMMERCIAL SHEARING* or *CRYSTEEL*, *HEIL* or *CUSTOM HOIST* or *MAILHOT*.

 - 102.15.3 To provide a minimum 50 degree dump angle.
 - 102.15.4 Hydraulic porting to be one (1) inch with one (1) inch hose.
 - 102.15.5 Hydraulic porting to provide a dump body raise time of between 18 to 27 seconds, based on an engine RPM of 1,500.
 - 102.15.6 Hydraulic porting to provide a dump body lowering time of between 20 to 25 seconds, empty.

102.15.7 Capable of lifting the body to a minimum of 50 degrees dumping angle, be able to pull itself off stroke without bottoming the telescoping bearings and have a dumping cycle in keeping with the standards of the industry.

102.15.8 Shall accept a minimum working pressure of 2,000 PSI.

102.16 Dump Body Stop:

102.16.1 A cable stop from rear part of dump body to dump lever control valve to be properly installed to prevent body from lifting to a point where hoist cylinder can become overextended to where hoist can bind and not lower properly. (Internal hoist cylinder bypass type stops are not acceptable.)

102.16.1.1 Manual dump body stop valve to be *FORCE AMERICA* p/n FRC904S-C-16 or equivalent.

102.16.2 All welding to meet American Welding Society specifications, Structural Welding Code D1.1 (current editions).

102.17 Paint:

102.17.1 To be painted with polyurethane.

102.17.2 To be White.

102.17.3 Paint manufacturer's approved primer, sealer and thinner is required.

102.18 Any and all grease fittings are to be a threaded zerks. Press-in type zerks are not acceptable.

**103.0 HYDRAULIC POWER TAILGATE WITH EXTENDED BOX FOR 8 YARD DUMP BODY
(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):**

103.1 Will utilize the box as described above, but with the following changes:

103.2 The existing tailgate assembly will be removed and be repositioned 12 inches further rearward (thus making the box length 14 ½ feet) and will incorporate a hydraulic system that will not only allow the tailgate to operate normally, but will allow the tailgate to open vertically up to a height of approximately 18 inches. The purpose for this design change is to dump chipped rock into a chip spreader with an even flow.

103.2.1 Note: What we are after is for the horizontal distance from the center of the hinges to the back of the tailgate to be approximately 21-1/4 (21.25) inches.

103.2.2 Note: What we are after is for the horizontal distance from the center of the hinges to the back of the dump body to be 19 ½ (19.5) inches and centered 62 ½ (62.5) inches from the chassis trunnion. After bid award, there most likely be changes as to the location of dump body hinge and the butt plate, and on how a rear wing post would be mounted. We will work with the successful bidder (and body builder) at that time to make these changes. Change orders may be required if agreed upon by the bidder and the State. Clarification Note: The distance to the end of the dump body does not include the tailgate.

103.3 Box is to have a pneumatic tailgate latch, mounted upside down, to allow tailgate to swing-out, like a conventional tailgate, when in the down position.

103.4 Box is to have a guide rail to prevent bottom of tailgate from swinging out when raised vertically.

103.5 To include a height indicator, in two (2) inch increments, located on rear post.

103.6 Tailgate is to have support saddles, one (1) on each side of tailgate to stabilize the tailgate when in lowered position.

103.7 Hydraulic cylinders, two-way, to be mounted inside rear corners of box, to be protected as much as possible from spilled gravel and rocks, but to also be easily removed (by bolt-on plate/cover) for repair.

- 103.7.1 Hydraulic cylinder Rods: To be nitrided, with rod diameter of 1¼ (1.25), rod stroke of minimum 18 inches.
- 103.8 System to include flow control valve and pressure relief valves.
- 103.9 Truck's existing cab controls for hydraulic cylinders will be utilized.
- 103.9.1 No special cab hydraulics are required, other than the referenced drawing mentioned at the end of this specification.
- 103.9.2 The State of Alaska will be responsible for additional hydraulic lines.
- 103.10 Also, refer to the "Hydraulic Schematics" in the SPECIFICATION DRAWING AND SKETCHES SUPPLEMENT section of this ITB.
- 103.11 Any and all grease fittings are to be a threaded zerks. Press-in type zerks are not acceptable.
- 103.12 **Chip Spreader Hitch Bar:**
- 103.12.1 In addition, a butt plate mounted chip spreader hitch bar is to be included. This hitch bar will be used to tow the truck backwards by the chip spreader while the chip spreader's hopper is being loaded from the truck's dump body.
- 103.12.2 To be bolt on, to the butt plate. Utilization of the pintle hitch bolts would be a preferred option.
- 103.12.3 The bar is to be 1¾ (1.75) inch in diameter and have an inside bar length of 13 inches.
- 103.12.4 The bar is to be centered 14 inches above level ground, unloaded dump box.
- 103.12.5 The bar is to be located directly below the saddle of the pintle hitch.
- 103.12.6 Truck frame, butt plate and hitch bar to be sufficiently reinforced to prevent bending when truck is towed backward by the chip spreader.
- 103.13 Photos are available upon request.

104.0 HYDRAULICS (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 104.1 It is the intent and purpose of this specification to describe a hydraulic system to be installed for operation of; dump body or sander, front plow equipment, belly blade, and snow wing.
- 104.2 (*) Acceptable pump is; US manufactured axial piston pump, *PARKER* PAVC 100 or *REXROTH* A10V0100, pressure and flow compensated load sensitivity, minimum 6.1 cubic inch displacement. Pump to have a minimum two (2) inch suction, 1¼ (1.25) inch keyed drive shaft, and SAE type "C" mounting flange.
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- 104.2.1 To include a one (1) inch high-pressure steel ¼-turn ball valve at the pump outlet.
- 104.3 Cooling system mounting and tank bottom configuration to be compatible and so designed to not interfere with hydraulic pump installation.
- 104.4 Crankshaft PTO adapter, installed by the truck manufacturer to accept *SPICER* Series 1310 universal.
- 104.4.1 Drive line yokes to be ½-round (if available) on the drive shaft.
- 104.5 Main Control Valve Bank:
- 104.5.1 (*) Valves are to be *PARKER* or *REXROTH* MP-18.
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- 104.5.2 Hydraulic valves shall be modular manifold or sectional with the exception that the auger and spinner functions can be of a manifold design with integral end cover.

- 104.5.3 Each function requires an individual manifold or section or manifold/end cover stacked together.
- 104.5.4 Intentionally left blank.
- 104.5.5 All segments shall have heavy-duty continuous duty coils and connections shall be with *HIRSHMAN* or *AMP* Timer connectors.
- 104.5.6 Each section shall be equipped with a manual adjustable override.
- 104.5.7 The dump body segment shall be rated with to minimum 35 GPM with all others rated to minimum 20 GPM.
- 104.5.8 Valves to be arranged as follows:
 - 104.5.8.1 **Hoist** - 3-way, single acting cylinder.
 - 104.5.8.2 **Plow** – 4-way, double acting cylinder.
 - 104.5.8.3 **Plow Angle** – 4-way, double acting cylinder. **Note:** This valve will be required on all trucks equipped with plow hitches. System to include a crossover relief valve mounted onto the left side of plow hitch.
 - 104.5.8.4 **Wing Toe** – 4-way, double acting cylinder with pressure limit for raise and pressure relief for lower.
 - 104.5.8.5 **Wing Heel** – 4-way, double acting cylinder with pressure limit for raise and pressure relief for lower.
 - 104.5.8.6 **Wing Raise** – For benching, 4-way, double acting cylinder.
 - 104.5.8.7 **Belly Blade** – Circle turn, 4-way, double acting cylinder.
 - 104.5.8.8 **Belly Blade** – Curl, 4-way, double acting cylinder with pressure relief for lower and timed delay.
 - 104.5.8.9 **Belly Blade (Oscillating)** – Lifts left, 4-way, double acting cylinder.
 - 104.5.8.10 **Belly Blade (Oscillating)** – Lifts right, 4-way, double acting cylinder.
 - 104.5.8.11 **Conveyor**
 - 104.5.8.12 **Spinner**
 - 104.5.8.13 **NOTE:** Valve stack may differ from truck to truck, depending on attachments. The last two (2) functions, Conveyor and Spinner, could alternatively be supplied with a two (2) function manifold using *HIRSCHMAN* or *AMP* Timer connectors. This manifold would also include an integral end cover function.
- 104.6 Valve Bank Enclosure:
 - 104.6.1 Valve assembly shall be mounted in a weather tight enclosure.
 - 104.6.2 Enclosure shall be fabricated of 12 gauge steel and designed so that it will not allow moisture or dirt inside.
 - 104.6.2.1 To be heavy-duty so that top can be used as a step to allow operator or maintenance personnel access to fuel tank and view contents of dump body or material spreader.
 - 104.6.2.2 Top of enclosure is to be equipped with expanded grip strut metal.
 - 104.6.3 Location: To be outside of frame, left side directly behind cab (mounted on “L” brackets).

- 104.6.4 Valves to be mounted with all ports coming out the bottom with holes allowing for hose adapter fittings.
- 104.6.5 Valves will be “boxed in” with cover and not the base.
- 104.6.6 The cover shall be held onto the enclosure by four (4) each heavy-duty type rubber latches.
 - 104.6.6.1 The cover shall be easily removable, providing access to the valves, when the dump box is in the down position.
- 104.6.7 All plumbing shall be external, directly out the bottom of the valve enclosure.
- 104.7 Sand Spreader Control:
 - 104.7.1 Refer to 107.0 CONTROL CONSOLE.
- 104.8 Hydraulic Reservoir:
 - 104.8.1 Capacity: Minimum 30 usable gallons with two (2) inch air space.
 - 104.8.2 Constructed of minimum seven (7) gauge pickled and oiled steel.
 - 104.8.3 Location:
 - 104.8.3.1 To be mounted above the pump to help prevent possibility of cavitation.
 - 104.8.3.2 The height of the tank is not to block the rear window of the cab
 - 104.8.3.3 Access, utilizing grip strut metal step(s) or platform, shall be provided, along with hand grabs as necessary.
 - 104.8.4 Suction Outlet:
 - 104.8.4.1 To provide a removable 100 mesh screen in the hydraulic tank suction outlet sized for proper flow.
 - 104.8.4.2 The suction port shall be located slightly off of the bottom of the reservoir.
 - 104.8.4.3 To include a two (2) inch full flow ¼-turn brass ball valve, for servicing of tank.
 - 104.8.5 To include a magnetic drain plug, minimum ¾ (0.75) inch NPT. To include a sight glass in a protected location, but be easily seen by ground personnel.
 - 104.8.6 Filler breather cap assembly to include a removable basket and chained cap.
 - 104.8.7 Design should provide for easy access to filler and plumbing.
 - 104.8.8 Cleanout Access: To include cleanout cover(s) or plate(s) to allow access to all areas within the reservoir tank.
 - 104.8.9 Hydraulic system filter to be spin-on replaceable absolute rated element filter (minimum 10 micron) on return side with return line check valve between tank and filter to prevent excessive loss of oil when changing of filter.
 - 104.8.9.1 To include a filter condition or restriction indicator at the filter location.
 - 104.8.10 Sight glass(es) to show maximum and minimum levels.
 - 104.8.11 To include an electric low level warning device with a console mounted light and audible buzzer indicating when oil is down to low level on the reservoir sight glass.
 - 104.8.12 To include a high temperature warning device with a dash or dash or console mounted light.
 - 104.8.13 Tank fittings are to be machined steel for pressure and suction.

- 104.8.14 Return plumbing in the tank is to include a vertical down pipe below oil level with a 45 degree cut at the outlet of the pipe.
- 104.8.15 Design shall be up to the standards of the industry, with reference to welding, baffles and specific requirements listed above.
- 104.8.16 Hydraulic Hoses and Hose Fittings:
- 104.8.16.1 Hydraulics with capped ends for folding gooseneck trailer and side-dump trailer and belly dump sander/material spreader to be located on back passenger side of headache rack, approximately six (6) inches above drom deck floor. Pressure and return lines to be clearly labeled with engraved plates that are secured with bolts or machine screws to the headache rack.
- 104.8.16.2 High pressure hydraulic hose to be *WEATHERHEAD* H-104 or equivalent.
- 104.8.16.3 Low pressure hydraulic hose to be *WEATHERHEAD* H-325 or equivalent.
- 104.8.16.4 Suction line is to be 100R4.
- 104.8.16.4.1 Low pressure hydraulic suction line is not acceptable.
- 104.8.16.5 All hoses to be equipped with *WEATHERHEAD* Coll-O-Crimp or *J.I.C.* fittings.
- 104.8.16.6 Fittings; "O" split-flange "O" ring type with *J.I.C.* and 45 degree NPT type to be used only where "O" ring types are not suitable.
- 104.8.16.7 All hoses and lines, properly sized, installed, and secured, to provide adequate function speed, proper bend radius and avoid sag and chaffing.
- 104.8.16.8 Hydraulic Lines: To be guarded and wrapped with *WAYTEK, INC.* Spiral Wrap Tubing. *WAYTEK, INC.*, 1-800-328-2724.
- 104.8.16.9 Routing to be most advantageous to future maintenance.
- 104.8.16.10 Routing of lines are not to be above, below or outside of frame.
- 104.9 Hydraulic Oil: Units to be provided with AW32, provided these oils are approved by the hydraulic component manufacturers for our application.

105.0 CONTROL CONSOLE (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 105.1 All functions, other than standard OEM chassis or otherwise specified, may be provided from within the cab from a centrally mounted control console or from a conveniently located position on the dash by OEM chassis.
- 105.1.1 Exterior mirror control switches may be located on this console.
- 105.1.2 The sander control is to be placed at an angle for easy sight and access to controls.
- 105.2 The control console will house the electronic spreader control, auxiliary switches, warning lights and buzzer, and controls, as required, for the front snowplow, snow wing, belly blade, dump hoist, and material spreader.
- 105.3 **Joystick for proportional hydraulics** is to include the following:
- 105.3.1 (*) The *COMPONENT TECHNOLOGY* Model Stormguard SG6 or equivalent, provided the following specifications are met:

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- 105.3.1.1 On automatic transmission equipped trucks that include the transmission shift lever option, the shift lever is to be mounted for easy and quick access.

- 105.3.1.2 On manual transmission equipped trucks, the console may need to be placed at about a 45 degree angle in order for ease of shifting.
- 105.3.1.3 To include “Dead-Man” trigger switch.
- 105.3.1.4 To include six (6) buttons with 3-axis capability functions for the following:
 - 105.3.1.4.1 Button #1: Front plow down (Y+ axis). Plow up (Y- axis). And if reversible plow hydraulics is requested – Plow angle left (X- axis) and plow angle right (X+ axis).
 - 105.3.1.4.2 Button #2 on belly blades (BB) without oscillation: BB down (Y+ axis). BB up (Y- axis). BB angle left (Z- axis). BB angle right (Z+ axis).
 - 105.3.1.4.3 Button #2 on belly blades (BB) with oscillation: BB left down (Y+ axis). BB left up (Y- axis). BB right down (X+ axis). BB right up (X- axis). BB curl down (Z+ axis). BB curl up (Z- axis).
 - 105.3.1.4.4 Button #3 on wing: Toe down (Y+ axis). Toe up (Y- axis). Heel down (X+ axis). Heel up (X- axis).
 - 105.3.1.4.4.1 Trucks equipped with a benching wing require down (Z+ axis) and up (Z- axis).
 - 105.3.1.4.5 Button #4 on dump hoist: Hoist down (Y+ axis). Hoist up (Y- axis).
 - 105.3.1.4.6 Button #5: Blast.
 - 105.3.1.4.7 Button #6: Pass.
 - 105.3.1.4.8 **Note:** On oscillating belly blades, the left and right blade angle left/angle right functions are to be accomplished by utilizing a SPDT (single pole double throw) rocker switch with momentary ON – OFF – Momentary ON. This switch is to be located close to the joystick and be placed horizontally. The “Z” axis of button #1 can be used to control the belly blade rotation in lieu of a rocker switch.
- 105.3.1.5 To incorporate the use of short-circuited protected PWM (Pulse Width Modulation) outputs. The PWM outputs shall be current regulated and to operated in the selected range regardless of fluctuations in truck system voltage. The PWM frequency shall be field selectable to accommodate different valve ranges. The system shall include a DC to DC power supply to function in a 9 to 16 volt input range.
- 105.3.1.6 To include a dash mounted LCD programmable “Heads-Up” display, which would display, as a minimum:
 - 105.3.1.6.1 Which joystick function (button is activated).
 - 105.3.1.6.2 Road temperature (in Fahrenheit).
 - 105.3.1.6.3 Ambient air temperature (in Fahrenheit).
- 105.3.1.7 All switches and indicator lights are to be easily accessed/viewed.
- 105.4 **Sander Control (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):**
 - 105.4.1 Conveyor control.

- 105.4.2 Spinner control.
 - 105.4.3 Sander Control Features:
 - 105.4.3.1 (*) *FORCE AMERICA* Model SSC2100 or *COMPONENT TECHNOLOGY* Model AS3 or BOSCH REXROTH Model CS230 or equivalent built-in unit

 - 105.4.3.2 Ground based spreader control.
 - 105.4.3.3 Material rate selections (minimum of 9 on settings).
 - 105.4.3.4 Detented control dials (minimum of 9 on settings).
 - 105.4.3.5 Standby with indicator light.
 - 105.4.3.6 Integrated spinner/blast dial with light.
 - 105.4.3.7 Integrated blast function.
 - 105.4.3.8 Blast timer cancel.
 - 105.4.3.9 Mechanical or electric speedometer.
 - 105.4.3.10 Current compensated valve drive outputs.
 - 105.4.3.11 Remote standby and blast inputs.
 - 105.4.3.12 Adjustable P.W.M. (Pulse Width Modulation) frequency.
- 105.4.4 The unit must be supplied with a separate easy to service ground sense signal connection, valve control connection, and main power connection.
- 105.4.5 To indicate when the material/sand spreader control system is operating, a dash mounted (or it may be also incorporated into the dash mounted 'heads-up' display) 5/8 inch diameter amber indicator light that is easily seen is to be included. The light shall be a COLE HERSEE p/n PL-116-AC001 or equivalent.
- 105.5 The center must also be supplied with color-coded wiring throughout.
- 105.6 All of the above controls to be properly labeled, illuminated, and be adequately spaced for ease of operation.
- 105.7 The console is not to interfere with the removal of the doghouse, if so equipped.
- 105.8 The Cab floor console/pedestal mount is to be properly reinforced to prevent fatigue failure (existing cab floor bracing to be utilized where possible).
- 105.9 The location of the hand control levers, switches and transmission shift lever are to be approved prior to pilot inspection.
- 105.10 Switch Panel and Light System:
- 105.10.1 Switches shall be minimum 15 amp rating with ring terminals, magnetic automatic self-reset internal circuit breaker type including dual intensity light indicators.
 - 105.10.2 Switch labeling shall be by means of a backlit silk screened or COMPONENT TECHNOLOGY Touch-Guard or similar, DYMO type labels are not acceptable.
 - 105.10.3 Switches shall be mounted so that the upper throws correspond to ON function.
 - 105.10.4 Switches shall have six (6) inches of slack wire to allow for serviceability.
 - 105.10.5 Switches and indicator lights, as required, shall be labeled and function as follows:
 - 105.10.5.1 Plow Lights / Truck Lights –

- 105.10.5.1.1 PDT, 2-Position, ON/OFF
- 105.10.5.2 “Moose” Lights –
 - 105.10.5.2.1 SPST, ON/OFF
- 105.10.5.3 Belly Blade Lights –
 - 105.10.5.3.1 SPST, ON/OFF
- 105.10.5.4 Snow Wing Lights –
 - 105.10.5.4.1 SPST, ON/OFF
- 105.10.5.5 Sander Lights –
 - 105.10.5.5.1 SPST, ON/OFF
- 105.10.5.6 Extra Switch –
 - 105.10.5.6.1 SPST, ON/OFF
 - 105.10.5.6.2 **(OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule)**: When requested, this switch is to be supply power to the #217 6x4’s wire position #4, in the 7-wire socket located at the lower left cab area for the sander/material spreader. The label would be “Pre-Wet”. In addition, a Pre-Wet “ON” indicator light would be required. NOTE: A RELAY IS NOT NEEDED BECAUSE ONLY 1.67 AMPS IS REQUIRED TO POWER A COIL ON THE SANDER.
- 105.10.5.7 Air Tailgate (with raised guard) –
 - 105.10.5.7.1 SPST, UNLATCHED/CLOSED
- 105.10.5.8 Air Tailgate Unlatched –
 - 105.10.5.8.1 Indicator Light
- 105.10.5.9 Body Up –
 - 105.10.5.9.1 Indicator “UP” Light
- 105.10.5.10 Low Hydraulic Oil –
 - 105.10.5.10.1 Warning Light
- 105.10.5.11 High Hydraulic Oil Temperature –
 - 105.10.5.11.1 Warning Light.
- 105.11 Main 12-volt DC battery feed to control console shall be protected by a *WIRED-RITE* 80 amp manual reset circuit breaker or equivalent. This breaker protects and provides power to a 75 amp *BOSCH* relay. This relay provides power to all circuits when ignition switch is engaged.
- 105.12 Power to the console shall be provided through an *ANDERSON POWERPOLE* Model PP75A with four (4) gauge terminals.
- 105.13 The console will also incorporate *AMP* CPC or similar, flange mount connectors to allow for easy removal of console from the cab.
- 105.14 All switches, gauges and controls to be properly identified.
 - 105.14.1 *DYMO* type tape labels are not acceptable.

- 105.14.2 Stick-on type labels are not acceptable unless they are listed in the parts book with part numbers. Otherwise, the labels are to be riveted or similar to maintain position.
- 105.15 All dials, gauges, switches, controls, and ID's to be properly lighted for day or night operation (a flexible cable night light is not acceptable).
- 105.16 The control console/pedestal is to be mounted between the driver and passenger seat, but is not to interfere with removal of the "dog-house" access cover to the engine.
- 105.17 Access panels, including a lift-out or hinged panel for access to electrical switches, indicators, strobe light power supply, etc., shall be provided for ease of maintenance.
- 105.18 The Cab floor console/pedestal mount is to be properly reinforced to prevent fatigue failure (existing cab floor bracing to be utilized where possible).
- 105.19 **NOTE:** The location of the hand control levers, switches and transmission shift lever are to be approved by the Contracting Officer or Specification Writer **prior to the pilot inspection.**
- 105.20 Wiring:
 - 105.20.1 The system shall include all necessary wiring and switching required to be fully operational.
 - 105.20.2 All wiring that will be exposed outside the vehicle cab shall be of weatherproof TPE type.
 - 105.20.3 Connectors:
 - 105.20.3.1 To be zinc die-cast E-coated or better.
 - 105.20.3.2 To provide complete sealing.
 - 105.20.4 The cable jacket to be TPE thermoplastic elastomer and is to be molded to the connectors.
 - 105.20.5 Cable to be resistant to oxidation, heat, oil, low temperature flexibility, weather, sun, ozone, abrasion, flame, water, acid, alkali, gasoline, benzyl, degreaser solvents, and alcohol.

106.0 CLASS 840-2 - BELLY BLADE:

- 106.1 Non-Oscillating and Oscillating, type (**OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule**).
 - 106.2 (*) To be *MONROE* Model MS3512 or *SCHMIDT* Model PB-12 (Non-Oscillating) or Model PB/TG-12 (Oscillating), Extra Heavy-Duty Underbody Scraper. Unit provided to be the most heavy-duty model available.
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- 106.3 Cylinder rods to be nitrided.
 - 106.4 Moldboard:
 - 106.4.1 Hinges are to be bolted.
 - 106.4.2 Height:
 - 106.4.2.1 20 inches, minimum, measured vertically (Non-Oscillating type).
 - 106.4.2.2 15 inches, minimum, measured vertically (Oscillating type).
 - 106.4.3 Thickness: One (1) inch, minimum.
 - 106.4.4 Cutting Edge:
 - 106.4.4.1 Total length of 12 foot.
 - 106.4.4.2 Thickness of 5/8 (0.625) inch, minimum.

106.5.1 To be a one (1) piece, one (1) inch in thickness, circle with multiple plowing positions available.

106.5.2 Rotation Range: If a mid-mount wing is not an attachment, the belly blade, as a minimum, will have rotation range from a perpendicular/90 degree position to a right and left hand discharge angle of 25 degrees (off center). If a mid-mount wing is an attachment, the belly blade, as a minimum, will have a rotation range from a perpendicular/90 degree position of 25 degrees (off center) on the side of the wing. In other words, the belly blade is not required to discharge to the other side.

106.5.3 Reversing to be accomplished with two (2) each four (4) inch inside diameter (minimum diameter) double-acting cylinders with two (2) inch outside diameter (minimum diameter) piston rods.

106.5.3.1 These cylinders are to provide a hydraulic lock for holding the moldboard in place while in use.

106.5.3.2 Cross-over relief valve to be included.

106.5.4 Reversing circle to pivot with a five (5) inch diameter center pin and be attached with three (3) each ¾ (0.75) inch diameter mounting bolts to prevent hole elongation and will be relubable with a remote mounted (out at the edge of the moldboard) threaded grease zerk.

106.6.1	Independent left and right pitch control will be an integral component of the circle.
106.6.2	For the <i>SCHMIDT WAUSAU</i> Model PB/TG-12 oscillating blade the following is to apply:
106.6.2.1	This underbody blade shall be supported and mounted to truck by side frames that reinforce truck frame.
106.6.2.2	The side frame weldments shall be furnished with four (4) formed end channels to contain parallel lift linkages.
106.6.2.3	The side frame weldments shall bolt to the truck frame without interference with dump bodies for Wausau wings or plows.
106.6.2.4	Two (2) independently controlled lift cylinders (one located on each side of the underbody) to raise, lower or tilt moldboard right or left.
106.6.2.5	The hydraulic cylinders are to be a minimum of 3-1/2" bore diameter with a 1-1/2" diameter rod.
106.6.2.6	This to be accomplished by the lift cylinders operating a series of "parallel lift linkages, slide and bell cranks.

106.8 Lighting:

- 106.8.1 Two (2) each *WAGNER* Model H7610, or equivalent, PAR46, halogen flood lights, 50 watt, 5,200 candlepower, mounted into *SIGNAL STAT* Model 620H adjustable housings, located on each side of truck, approximately level with top of frame, on lower rear corner of cab areas with lights directed onto blade.
- 106.8.2 Refer to specification supplement item 105.0 CONTROL CONSOLE for switch information.

106.9 Paint:

- 106.9.1 To be cleaned of all contamination and millscale by media blasting.
- 106.9.2 To be then primed and painted, minimum of 3.5 mils, with urethane product to manufacturer's recommendations or powder coated, black in color.

106.10 All hardware (nuts and bolts) to be grade-8.

106.11 Any and all grease fittings are to be a threaded zerk. Press-in type zerks are not acceptable.

107.0 CLASS 854-P9LH – SNOW WING, PATROL, LEFT HAND, TRUCK MOUNTED (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 107.1 (*) Patrol wing, one-way, left hand (mid or rear mounted as ordered), extra heavy-duty high speed side snow wing assembly, steel construction, *MONROE* Model 9DFWMB or *SCHMIDT WAUSAU* Model SPW-10. Provided all of the following specifications are met.

- 107.2 Cylinder rods to be nitrided.
 - 107.2.1 Wing-Up cylinder to be de-cel type having a cushioning affect when bringing the wing-up into a stored position.
- 107.3 Cutting Edge:
 - 107.3.1 Total length of nine (9) foot.
 - 107.3.2 Thickness of 5/8 (0.625) inch, minimum.
 - 107.3.3 Height of eight (8) inches, minimum.
 - 107.3.4 Plow bolts to be 5/8 (0.625) inch diameter.
 - 107.3.5 To be in a single nine (9) foot section, bolt-on, replaceable, with punching (3-3-6-6-6-6-6-6-6-6-6-6-6-3-3).
- 107.4 To include a *FORCE AMERICA* Wing Loc or equivalent, mounted to the wing heel lift cylinder, to act as a safety device by locking the load in case of hydraulic line breakage and also to prevent wing drifting.
- 107.5 Forward and rear posts to be bolt-on design for summer removal.
- 107.6 Rear post and heel to incorporate two (2) each push arms.
- 107.7 Lighting:
 - 107.7.1 One (1) each *WAGNER* Model H7610, or equivalent, PAR46, halogen flood lights, 50 watt, 5,200 candlepower, mounted into a *SIGNAL STAT* Model 620H adjustable housing, located on the upper rear post with light directed onto a working position blade.
 - 107.7.2 Strobe Light:
 - 107.7.2.1 To be a *WHELEN* Model PAR36L LED strobe, rubber housing mounted.
 - 107.7.2.2 To be located on the rear outside end of the blade.

107.7.3 Refer to specification supplement item 105.0 CONTROL CONSOLE for switch information.

107.8 Paint:

107.8.1 To be cleaned of all contamination and millscale by media blasting.

107.8.2 To be then primed and painted, minimum of 3.5 mils, with urethane product to manufacturer's recommendations or powder coated, black in color.

107.9 Any and all grease fittings are to be a threaded zerk. Press-in type zerks are not acceptable.

108.0 CLASS 854-P9RH – SNOW WING, PATROL, RIGHT HAND, TRUCK MOUNTED (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

108.1 (*) Patrol wing, one-way, right hand (mid or rear mounted as ordered), extra heavy-duty high speed side snow wing assembly, steel construction, *MONROE* Model 9DFWMB or *SCHMIDT WAUSAU* Model SPW-10. Provided all of the following specifications are met.

108.2 Cylinder rods to be nitrided.

108.2.1 Wing-Up cylinder to be de-cel type having a cushioning affect when bringing the wing-up into a stored position.

108.3 Cutting Edge:

108.3.1 Total length of nine (9) foot.

108.3.2 Thickness of 5/8 (0.625) inch, minimum.

108.3.3 Height of eight (8) inches, minimum.

108.3.4 Plow bolts to be 5/8 (0.625) inch diameter.

108.3.5 To be in a single nine (9) foot section, bolt-on, replaceable, with punching (3-3-6-6-6-6-6-6-6-6-6-6-3-3).

108.4 To include a *FORCE AMERICA* Wing Loc or equivalent, mounted to the wing heel lift cylinder, to act as a safety device by locking the load in case of hydraulic line breakage and also to prevent wing drifting.

108.5 Forward and rear posts to be bolt-on design for summer removal.

108.6 Rear post and heel to incorporate two (2) each push arms.

108.7 Lighting:

108.7.1 One (1) each *WAGNER* Model H7610, or equivalent, PAR46, halogen flood lights, 50 watt, 5,200 candlepower, mounted into a *SIGNAL STAT* Model 620H adjustable housing, located on the upper rear post with light directed onto a working position blade.

108.7.2 Strobe Light:

108.7.2.1 To be a *WHELEN* Model PAR36L LED strobe, rubber housing mounted.

108.7.2.2 To be located on the rear outside end of the blade.

108.7.3 Refer to specification supplement item 105.0 CONTROL CONSOLE for switch information.

108.8 Paint:

108.8.1 To be cleaned of all contamination and millscale by media blasting.

108.8.2 To be then primed and painted, minimum of 3.5 mils, with urethane product to manufacturer's recommendations or powder coated, black in color.

108.9 Any and all grease fittings are to be a threaded zerk. Press-in type zerks are not acceptable.

109.0 CLASS 854-B9RH - SNOW WING, 9-FOOT BENCHING, RIGHT-HAND REAR MOUNTED (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

109.1 (*) Benching wing, one-way, right hand rear mounted (mid-mounted is not acceptable), extra heavy-duty high speed side snow wing assembly, steel construction, *MONROE* Model 9DFWMB-B or *SCHMIDT WAUSAU* Model SPWB-9. Provided all of the following specifications are met.

109.2 Cylinder rods to be nitrided.

109.3 Cutting Edge:

109.3.1 Total length of nine (9) foot.

109.3.2 Thickness of 5/8 (0.625) inch, minimum.

109.3.3 Height of eight (8) inches, minimum.

109.3.4 Plow bolts to be 5/8 (0.625) inch diameter.

109.3.5 To be a single nine (9) foot section, bolt-on, replaceable, with punching (3-3-6-6-6-6-6-6-6-6-6-6-6-3-3).

109.4 Benching height, minimum 40 inches with level push arms.

109.5 To include a *FORCE AMERICA* Wing Loc or equivalent, mounted to the wing heel lift cylinder, to act as a safety device by locking the load in case of hydraulic line breakage and also prevents wing drifting.

109.6 Forward and rear posts to be bolt-on design for summer removal.

109.7 Rear post and heel to incorporate two (2) each push arms.

109.8 Lighting:

109.8.1 One (1) each *WAGNER* Model H7610, or equivalent, PAR46, halogen flood lights, 50 watt, 5,200 candlepower, mounted into a *SIGNAL STAT* Model 620H adjustable housing, located on the upper rear post with light directed onto a working position blade.

109.8.2 Strobe Light:

109.8.2.1 To be a *WHELEN* Model PAR36L LED strobe, rubber housing mounted.

109.8.2.2 To be located on the rear outside end of the blade.

109.8.3 Refer to specification supplement item 105.0 CONTROL CONSOLE for switch information.

109.9 Paint:

109.9.1 To be cleaned of all contamination and millscale by media blasting.

109.9.2 To be then primed and painted, minimum of 3.5 mils, with urethane product to manufacturer's recommendations or powder coated, black in color.

109.10 Any and all grease fittings are to be a threaded zerk. Press-in type zerks are not acceptable.

110.0 PAINT - TRUCK CAB AND CHASSIS:

110.1 Paint shall meet the same minimum quality requirements as the original manufacturer's standard for acrylic enamels, unless otherwise specified.

- 110.2 All painted surfaces to be primer coated with paint manufacturer's recommended primer for paint used.
- 110.3 To be OEM, White, polyurethane.
- 110.4 Hood (top surface only) to be painted flat (non-reflective) black.
- 110.5 Remainder, including; frame, battery box, running gear, etc., to be painted standard black.
- 110.6 Wheels are to remain factory OEM paint. White or light Gray is preferred.
- 110.7 NOTE: Do not paint any aluminum or stainless steel. (Non cab related parts).

111.0 RFI AND EMI PROTECTION:

- 111.1 Because of the electronic instrumentation controlling electric over air switches, etc., RFI and EMI protection is required to help eliminate malfunctions because of radios. This protection is to cover frequency ranges from 47 to 47.5 MHz. Radios will be producing up to 100 watts of power.

112.0 TRAINING (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 112.1 Bidder is to provide qualified factory trained instructors, within 30 days of acceptance by the State. Please give advance notice (call the contracting officer of this bid for the name and telephone number of the Regional Equipment Manager or Superintendent).
- 112.2 The bidder is responsible for the instructors being on time for the training.
- 112.3 Total of 16 hours in Anchorage and 16 hours in Fairbanks.
- 112.4 To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:
 - 112.4.1 Operating procedures per operating manual.
 - 112.4.2 Break-in procedures.
 - 112.4.3 Equipment limitations.
 - 112.4.4 Operator maintenance.
 - 112.4.5 Before operations checks and lubrication.
 - 112.4.6 Safety.
 - 112.4.7 Cold weather operations.
 - 112.4.8 Jump starting.
 - 112.4.9 Welding on equipment.
 - 112.4.10 Towing or transporting equipment.
 - 112.4.11 Instruments and controls.
 - 112.4.12 Gauge interpretation.
 - 112.4.13 Equipment and attachment operation, Do's and Don'ts.
- 112.5 To include a minimum of eight (8) hours of mechanics (Journeyman level) training including the following theory, trouble shooting, and test procedures for, as a minimum applicable agenda:
 - 112.5.1 Electronics.
 - 112.5.2 Electrical.
 - 112.5.3 Hydraulics.
 - 112.5.4 Air system.
 - 112.5.5 Drive train.

112.5.6 Engine and transmission electronics.

113.0 INSPECTIONS (OPTIONAL ITEM – Pricing is required. Refer to Section V – Bid Price Schedule):

- 113.1 Successful bidder will be required to provide pilot inspections prior to shipment to final FOB points.
- 113.2 Successful bidder is to provide the State **30 days notice** prior to each inspection for travel arrangements.
- 113.3 There will be two (2) each separate inspections:
- 113.4 The first inspection (for conformance to specifications) will be prior to a pilot model departing from the truck cab and chassis manufacturing plant, but after the pilot unit(s) have had all work done by that plant.
- 113.5 The second inspection will be for pilot models departing from the location where the remaining components, such as hydraulics, wings, plows, and belly blades, are installed.
 - 113.5.1.1 A one-way snowplow will be shipped by the State of Alaska to the location of the second inspection. The bidder will have the responsibility for and pay for shipping the one-way snowplow up to Anchorage with the truck.
 - 113.5.1.2 The one-way snowplow will weigh 3,480 pounds (or less) and will have a fulcrum point of 43 inches ahead of the center of the hitch connection, as per information listed in the Documentation Required section.
- 113.5.2 All trucks will be required to be complete and ready for service at the time of the inspection. Weights will be taken on plow trucks with the one-way plow. Material and equipment will be provided by the bidder or its subcontractor for conducting weight tests.
- 113.6 Representatives of the State will inspect specific completed units for conformance to specifications. The completed units, component equipment, and accessories shall be inspected and/or tested by the **manufacturer** for compliance with specifications **prior** to the arrival of the State inspection team. The State reserves the right to appoint an independent inspector at the State's expense to periodically monitor the progression of the unit(s) during the manufacturing process.
- 113.7 The Contractor shall provide full access to the State's inspector(s) or their designee(s) to the plant(s) including the plant(s) subcontractor(s) where manufacture is taking place.
- 113.8 These inspections by the State will be thorough and very critical, and will encompass a complete review of the specifications. Adequate time and technical personnel shall be made available to assist the State in these inspections.
- 113.9 Inspection Trip Costs: Should the pilot inspection be other than in Anchorage, Alaska, bidders are then to include in their bid price round trip coach "Y" air fare (ticket(s) to have capability to transfer from one major airline to another - not supersaver), with open arrival and departure times, for each inspector to the manufacturer's plant. It is also possible that the inspector that was scheduled to go on the trip will need to be replaced by someone else after the airline tickets have been purchased, so tickets may need to be changed. This is one reason for the "Y" class tickets.
 - 113.9.1 Per diem for each inspector shall be at a rate of \$120.00 per day each (travel day + 2 inspection days + travel day).
 - 113.9.2 The successful vendor shall assist by booking lodging reservations. Meals and lodging will be paid by the State inspectors.
 - 113.9.3 The successful vendor shall arrange and furnish all ground transportation necessary to conduct the inspection. Rental vehicle shall be full size (Chevy Malibu, Ford Taurus, etc.).
 - 113.9.4 While the State recognizes contractual responsibility in testing, the State reserves the exclusive right to reduce the number of inspectors when and if that action seems prudent. If the number of inspectors is reduced, the Contractor will return to the State all monies saved by that action within 30 days following the actual inspection.

- 113.10 It shall be the responsibility of the State inspector(s) to technically inspect and test the unit for compliance with the specifications.
- 113.11 It shall be the responsibility of the Contracting Authority Representative to observe the inspection and test to assure compliance with the published terms, conditions, and specifications of the bid, and to mediate any disputes, which may arise between the manufacturer and the Department of Transportation's representatives.
- 113.12 If it becomes necessary, the State or its representative will conduct reinspection of any subsequent work to be performed by the successful bidder. Should the State decide a reinspection(s) of the pilot vehicle is required, the vendor shall be required to pay for round trip air fare, ground transportation and per diem, as described previously, for the reinspections.
- 113.13 The pilot model inspection may result in minor modifications, which would require negotiation with the Contracting Officer. A change order to the contract must be issued prior to any modifications being accomplished.
- 113.14 FINAL ACCEPTANCE REMINDER: Final acceptance is at final destination; however, all major tests will be conducted at the manufacturer's place of business, unless the State has reason to believe alterations or damages have taken place which may have changed the performance or design characteristics of the unit since the time of inspection at the manufacturer's location.

NEXT PAGE CONTAINS DRAWING INFORMATION

113.14.1

DRAWINGS & SKETCHES

To reduce the computer byte size of this file, drawings and sketches were left out. Copies of these drawings and sketches are available upon request.

DRAWING # 3C

WHELEN DRAWING

DRAWING # 5C

PLOW & PLOW HEADLIGHT MOUNTING DETAIL

DRAWING # 6A-1

PLOW HITCH-1

DRAWING # 6B

FRAME CUT-OUT & REINFORCEMENT

DRAWING # 6C

DUMP BODY DETAIL

DRAWING

DUMP BODY HINGE FRAME

DRAWING

DUMP BODY HINGE PAD

DRAWING

HYDRAULIC TAILGATE

END OF SPECIFICATION SUPPLEMENT

BID PRICE SCHEDULE

BID SCHEDULE INSTRUCTIONS:

All bids must include both unit pricing and extensions and be otherwise complete in the format requested.

DELIVERY: Indicate, in the space(s) provided, the time required to make delivery after the receipt of an order (ARO). Failure to make an entry in the space(s) provided will be construed as an offer to deliver within "Required Delivery" NUMBER of calendar days ARO. Bids which specify deliveries in excess of "Required Delivery" NUMBER of calendar days ARO will be considered non-responsive and the bid(s) will be rejected.

The materials, equipment or services bid will conform to and meet the requirements of the Contract Bid Documents and are hereby incorporated into this document:

Complete the attached bid price sheets and return with other bid documents as required in Section II – Standard Terms and Conditions, paragraph 39.

BIDDER'S NAME: _____

Bidder agrees to supply Political subdivisions under the terms of this contract:

Yes_____ No_____

Alaska Business License No. _____

Vehicle Dealer License No. _____

BID PRICE SCHEDULE

DELIVERY: Not more than 240 days.

The Vendor will be responsible for shipments beyond the Seattle/Tacoma area as specified on each order. Actual freight cost is required to be listed as a separate line item on final invoice, and a copy of the actual shipping document showing price is to be attached.

SPECIFICATION #217 (6x4):

- | | | |
|-------|--|---------|
| 1. | Truck Cab & Chassis, 6x4
Truck Cab & Chassis (Year/Make/Model) | \$_____ |
| <hr/> | | |
| 2. | Winterfront
Reference Specification 1.4.6 | \$_____ |
| 3. | Starting aid (auto ether or glow plugs or grid heater)
Reference Specification 1.7.1 | \$_____ |
| 4. | Engine Oil Pan Heater
Reference Specification 1.7.3 | \$_____ |
| 5. | Battery Trickle Charger
Reference Specification 1.7.4 | \$_____ |
| 6. | Lever Shift Selector (in lieu of push button pad).
Reference Specification 2.2.1.4 | \$_____ |
| 7. | Manual, <i>FULLER</i> 18-Speed Transmission.
(In lieu of the automatic transmission)
Reference Specification 2.2.2 | \$_____ |
| 8. | <i>HENDRICKSON</i> RT-463 Rear Suspension,
Reference Specification 3.8.1.1 | \$_____ |
| 9. | <i>CLEAR-DRAIN</i> (in lieu of Air Dryer).
Reference Specification 3.10.11.3.1 | \$_____ |
| 10. | Exterior cab mounted fiberglass sunvisor.
Reference Specification 5.11 | \$_____ |
| 11. | 16,000 BTU Auxiliary Heater.
Reference Specification 5.15.1 | \$_____ |
| 12. | 30,000 BTU Auxiliary Heater.
Reference Specification 5.15.2 | \$_____ |
| 13. | Air Conditioning
Reference Specification 5.16 | \$_____ |
| 14. | Optional Rear View Mirrors (Exterior)
Reference Specification 5.17.2 | \$_____ |
| 15. | <i>ROADWATCH</i> system (in lieu of 6.1.13).
Reference Specification 6.1.13.1 | \$_____ |

- | | | |
|-----|---|----------|
| 16. | Pyrometer gauge.
Reference Specification 6.1.14 | \$ _____ |
| 17. | Manifold pressure gauge.
Reference Specification 6.1.15 | \$ _____ |
| 18. | Optional 120 Gallon Fuel tank.
Reference Specification 8.0 | \$ _____ |

SPECIFICATION SUPPLEMENT:

- | | | |
|-----|---|----------|
| 19. | Plow Hitch with Proportional Reversible Plow Hydraulics:
Reference Specification item 101.0 | \$ _____ |
| 20. | Manual Telescoping Plow Hitch Lift Arm:
Reference Specification item 101.2.2 | \$ _____ |
| 21. | Dump Body, (8-Yard AR400) with proportional Hydraulics.
Reference Specification item 102.0
Make/Model:

_____ | \$ _____ |
| 22. | Hydraulic Power Tailgate for 8 Yard Dump Body
To include Chip Spreader Hitch Bar.
Reference Specification 104.0 | \$ _____ |
| 23. | Control Console
Reference Specification item 105.0 | \$ _____ |
| 24. | Sander Control | \$ _____ |
| 25. | Pre-Wet Switch for Sander/Material Spreader,
Reference Specification 105.13.5.6.2 | \$ _____ |
| 26. | Belly Blade – Non-Oscillating Type
Reference Specification 106.0
Make/Model:

_____ | \$ _____ |
| 27. | Belly Blade – Oscillating Type,
Reference Specification 106.0
Make/Model:

_____ | \$ _____ |
| 28. | Snow Wing, Patrol, <u>Left</u> Hand, <u>Mid</u> Mounted
Reference Specification 107.0
Make/Model:

_____ | \$ _____ |
| 29. | Snow Wing, Patrol, <u>Left</u> Hand, <u>Rear</u> Mounted
Reference Specification 107.0
Make/Model: | \$ _____ |

30. Snow Wing, Patrol, Right Hand, Mid Mounted \$ _____
Reference Specification 108.0
Make/Model:

31. Snow Wing, Patrol, Right Hand, Rear Mounted \$ _____
Reference Specification 108.0
Make/Model:

MISCELLANEOUS

32. **Training, in Anchorage**, 16 Hours (Class #217) \$ _____
As per Specification Supplement 112.0

33. **Training, in Fairbanks**, 16 Hours (Class #217) \$ _____
As per Specification Supplement 112.0

34. **Chassis Pilot Inspection Trip** (1st trip, per person). \$ _____
As per Specification Supplement 113.0

35. **Body Builder Pilot Inspection Trip** (2nd trip, \$ _____
on a State Class #217 truck, per person).
As per Specification Supplement 115.0

36. **Publications**, \$ _____
complete set, including all attachments.
As per Section I, Special Terms and Conditions, paragraph 7.0

ALL ITEMS GRAND TOTAL \$ _____

(Items 1 – 36 TOTAL)

NOTE:

If you have other options that might be of interest to the State of Alaska, please let us know (prior to the workshop if possible). We may be able to insert it or them into the bid specifications or at least have you give us prices that may not be listed as a required to be priced item, such as those above. An example could be “OEM Heated Windshield”.